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THE RETROBATES

WHAT'S YOUR FAVOURITE PLAYSTATION 2 GAME?

DARRAN JONES

I'm going to have to choose Rez because I've completed it more times than any other PlayStation 2 game I own.

Expertise:
Juggling a gorgeous wife, two beautiful girls and an award-winning magazine

Currently playing:
Axiom Verge

Favourite game of all time:
Strider

DREW SLEEP

There's too many of them! This era defined a lot of who I am today and making me choose one game is criminal, Darran.

Expertise:
Becoming an uncle, hooray!

Currently playing:
Wargroove

Favourite game of all time:
Final Fantasy VIII

NICK THORPE

Virtua Fighter 4: Evolution, because it had one of the best single-player modes of any 3D fighting game in that generation (oh, and I'm a big VF nerd too).

Expertise:
Owning five Master Systems (I sold two)

Currently playing:
Resident Evil 2 (2019)

Favourite game of all time:
Sonic The Hedgehog

SAM RIBBITS

I found it difficult to pick a top ten for our poll, but Burnout 3: Takedown was always going to top my picks.

Expertise:
Crocaganda

Currently playing:
Wargroove

Favourite game of all time:
Croc: Legend Of The Gobbos

LUKE ALBIGÉS

Ribbit King. It is the pinnacle of human achievement and the one true esport.

Expertise:
Unstoppable Bomberman player and real-life Guitar Hero

Currently playing:
Resident Evil 2 (2019)

Favourite game of all time:
Micro Machines 2: Turbo Tournament

DAVID CROOKES

It has to be Grand Theft Auto: San Andreas for its huge scope and ambition although Shadow Of The Colossus pushes it close.

Expertise:
Amstrad, Lynx, adventures, Dizzy and PlayStation (but is it retro? Debate!)

Currently playing:
Gods Remastered

Favourite game of all time:
Broken Sword

JASON KELK

I've got to choose Gradius 5; it's beautiful and everything I thought arcade games would become while playing Nemesis as a kid.

Expertise:
Being a homebrew hero

Currently playing:
Pastfinder (Atari 8-bit)

Favourite game of all time:
Io

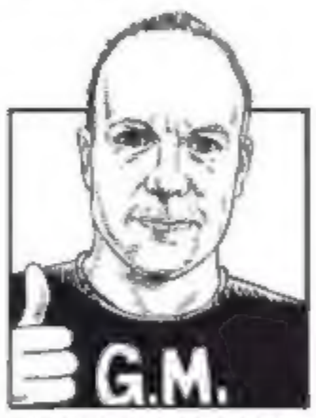
MARTYN CARROLL

So many to choose from, but I'd go with the perfect videogaming collab, Konami and Treasure's Gradius V.

Expertise:
Sinclair stuff

Currently playing:
Pikuniku

Favourite game of all time:
Jet Set Willy



GRAEME MASON

Well I'm going to have to say Resident Evil 4, right? I just love the way it revolutionised the whole series.

Expertise:
Adjusting the tape azimuth with a screwdriver

Currently playing:
Resident Evil 2 (2019)

Favourite game of all time:
Resident Evil 4

LOADING...

One of the reasons I always wanted to own an Amiga was because of The Bitmap Brothers. Sure, I was attracted to the point-and-click adventure releases and Dungeons & Dragons titles that were available, but it was the likes of Xenon 2: Megablast and Speedball 2, which were getting me excited.

For me, there seemed to be an exciting energy to the developer's games that simply didn't appear to be present in other titles of the time. You could pretty much tell when a game was by The Bitmap Brothers as soon as you saw a lone screenshot, and they had an identity that made them instantly stand out. And then of course there were the developers themselves, emulating rockstars with their sunglasses and cool press images, images that I would gaze jealously at in the magazines of the time. As a youngster I wanted to be a Bitmap Brothers developer because it seemed to epitomise the cool side of gaming cool throughout the late Eighties and Nineties.

It's something of a delight then to showcase not one, but two exclusive Bitmap-themed features for you. One speaks to key team members, while the other goes behind the scenes of Gods and the new remaster by Robot Riot games. But worry not, if the Bitmaps aren't your thing we have plenty more great articles to discover inside.

Enjoy the magazine!

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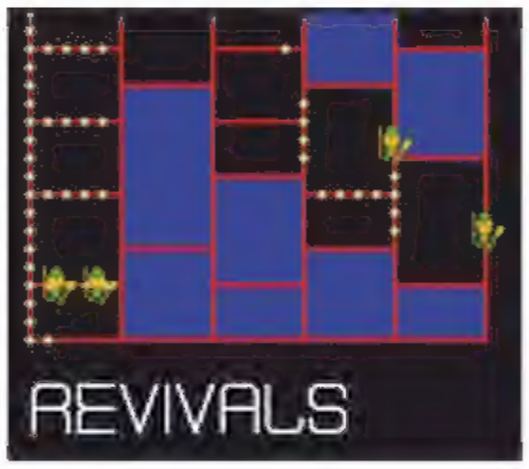

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Key developers celebrate Lord Sugar's classic 8-bit underdog

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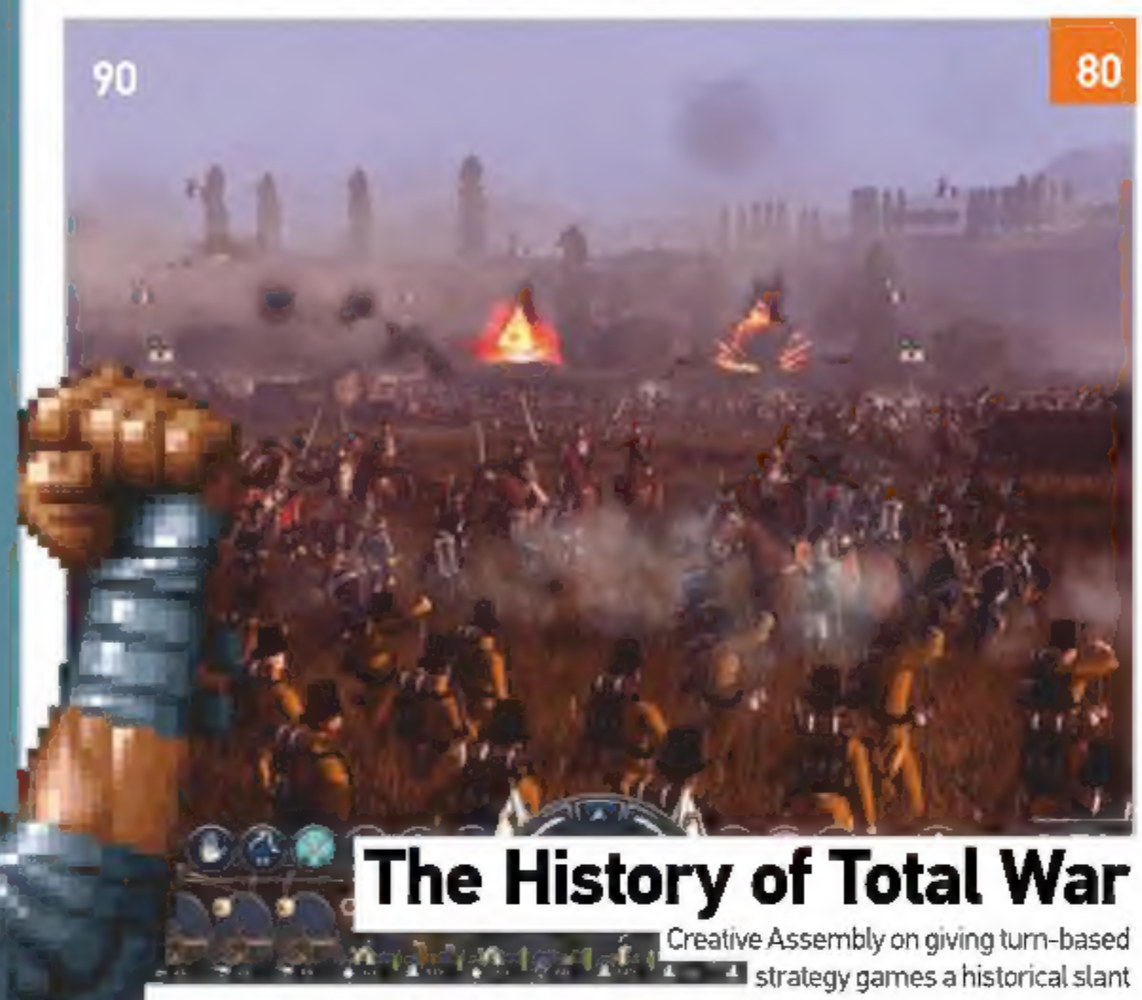

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THE MONSTER MASH

Adam Ferrando and Ralph Barbagallo on their brand-new pinball game

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Nick continues to cross the time streams and has landed in March 2002

One of the reasons we've always loved playing shmups and pinball games is because they require great hand-eye coordination and constantly push you to better yourself in order to get the highest score possible. Adam Ferrando and Ralph Barbagallo clearly feel the same way as their latest game, Demon's Tilt, combines these two genres. We found out how this interesting mash-up came to be.

Why make a pinball game?

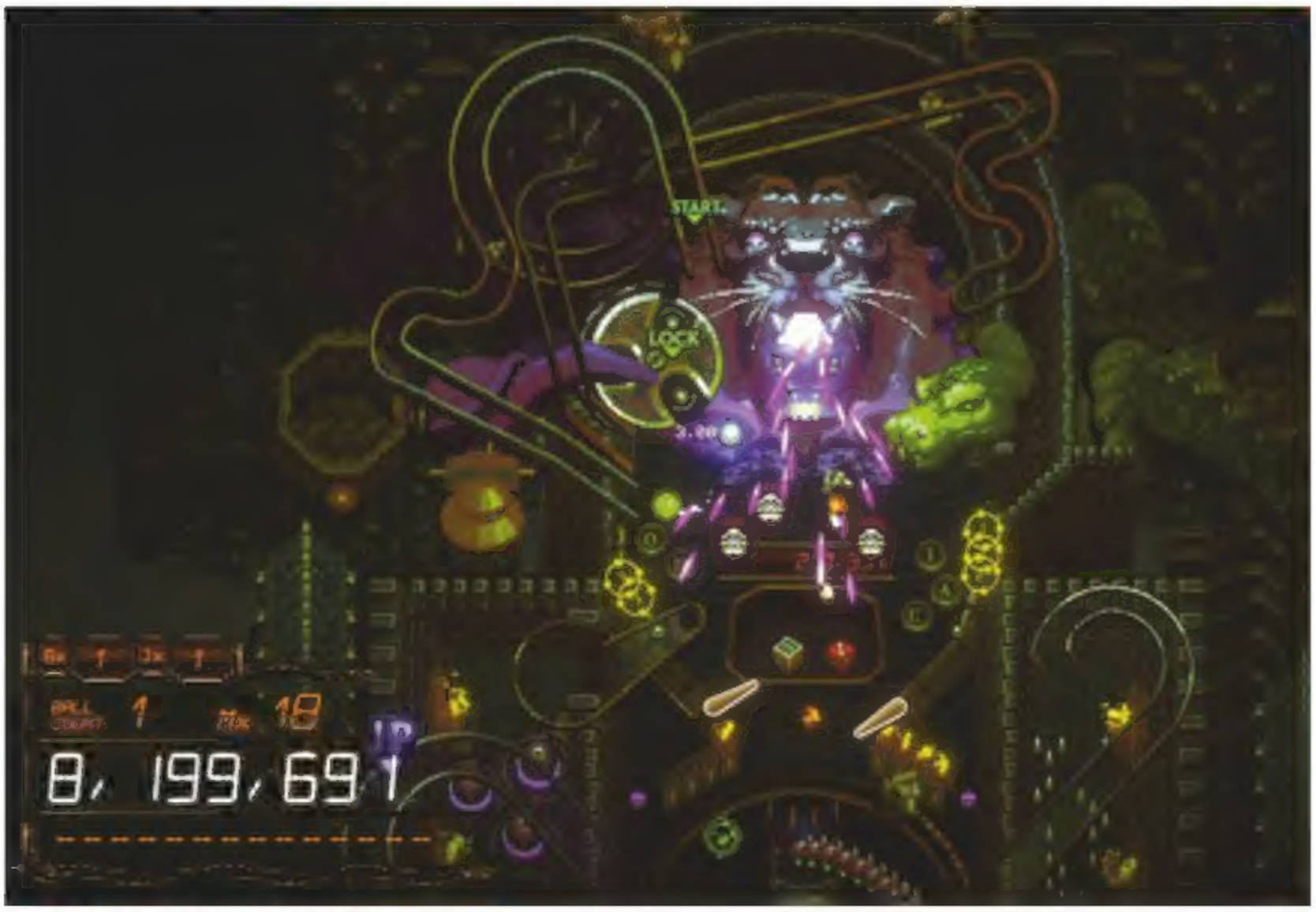
Adam Ferrando: Pinball was having a revival, thanks in part to digital pinball simulators, but there was no pinball in my area, so I had to drive up to New Hampshire and then eventually 30 minutes away to a private collection. I became obsessed, but had no dollars to buy a machine, so video pinball filled the void. But it wasn't enough, so I started making the game as a prototype. When pinball's popularity waned, it disappeared until pinball simulators came along.

Ralph Barbagallo: Back when I was a little kid, I would get into arguments with my uncle about videogames versus pinball. He used to take me to the local arcade, but all the way there would extol the virtues of pinball over my digital obsession. During the pinball revival in the early Nineties, I became a fan.

Being a super videogame nerd, I really liked video pinball. I spent countless hours

▪ (PC) There's an army of skeletons ahead. Best knock them all down

▪ Adam Ferrando (top) and Ralph Barbagallo (above) are drawing on their love for all things pinball for Demon's Tilt



▪ (PC) This lion doesn't look very happy and he's now attacking you.

making tables in Pinball Construction Set. I loved Midnight Magic on the C64, Pinball Quest on the NES, and Pinball Dreams on the Amiga, but the Crush series on the PC Engine was my absolute favourite. When Adam showed me the prototype of Demon's Tilt, I knew exactly what he was trying to do and wanted to get involved.

How do Demon Tilt's shoot-'em-up and hack-and-slash elements work?

AF: The game is firmly rooted in pinball, but uses a unique shmup-inspired magic system for scoring. Pink bullets populate the field, but they cannot hurt or kill the ball. For new players these serve as obstacles. Advanced players will utilise bullets as fodder for scoring. You can break them for modest points, transmute them into gold medals for your jackpots, or convert them into green magic, which heat-seeks baddies. It sounds complicated, but there is no extra burden on the player to interact with these systems (as in a Bomb Button, or Shoot Button) you just flip away and the systems run in the background. The hack-and-slash- elements come from the chaining system, which is designed to keep up momentum.

How long has it taken to create?

AF: I started in 2016 as a prototype, and I worked on it sporadically. When Ralph joined to turn it into a commercial product at the start of 2018 the pace became full-time. We are a two-person team, I cover art, design and gameplay and Ralph handles technical aspects, publishing, and is helping to scale more complicated gameplay systems. We also have wonderful outside support, especially in the sound department.

RB: I had worked with Adam on an augmented reality app some years ago. After that project, he asked me about making a pinball game. I pointed him in the right direction, but didn't expect much. Months later, he sent me the prototype and I lost my mind. It was so awesome! Once my schedule freed up, I decided to jump on board and dedicate my resources to finishing and shipping the game. We've had a lot of help from external contractors as well as friends and colleagues who have done us favours and provided invaluable advice. Our composer and sound artist, in particular, are incredible.

What does the videogame medium offer over traditional pinball?

AF: We can do impossible gameplay, though oddly I think I usually erred on the side of real pinball for most design choices. Distribution too, as everyone can own a copy for a fraction of the price!

RB: I always feel that video elements in pinball have a tricky balance as they can take away from the fun, mechanical nature of the game. Video pinball has no such restrictions so we're allowed to let our imaginations run wild – but not too far, as the game still has to be recognisable as pinball. The scoring and gameplay is firmly rooted in the physical game, but the videogame aspects blend much better than having a separate mode you have to play on a backglass display.

> **"When Adam showed me the prototype of Demon's Tilt, I knew exactly what he was trying to do"**
> Ralph Barbagallo

What's been the hardest thing to perfect and refine?

RB: One of the trickiest things to implement in any type of video pinball game is the camera. In 2D this is particularly challenging because you can't angle the view to see more of the table at once. We've spent a lot of time tuning the camera and opening up the parameters via the settings menu to let users adjust it. Especially [with] multiball, we don't expect to be able to satisfy everyone.

What separates Demon's Tilt from similar games?

AF: I practiced concept art and illustration for the first half of my freelance career, so with the art I tried to push the pixel art fidelity into the Neo-Geo and PSX era.

▪ You can find the distinctive sounding soundtrack for Demon's Tilt on SoundCloud.

We also have a killer original soundtrack and a ridiculous abrasive soundscape. I've also had playtesters describe the game as more pinball than pinball simulators, while also being more of a videogame.

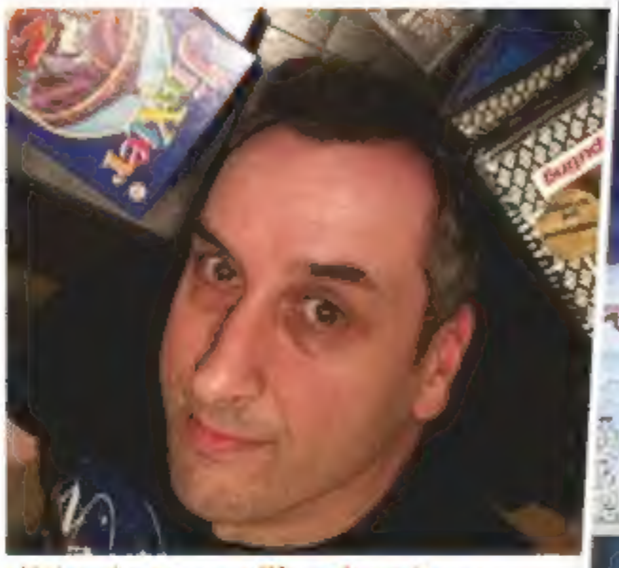
RB: Adam's game looks like nothing else. It has obvious influences, but it oozes a unique style. In fact, that's why I began working with Adam in the first place. I stumbled on his portfolio [and] I thought his stuff was wild, like nothing I had ever seen before. ★

PREPARE FOR ADVENTURE

MARK HARDISTY ON HIS BRAND-NEW TEXT ADVENTURE FANZINE

If you're the type of gamer who loved wrestling with parsers and using graph paper to map your way around imaginary worlds you're probably aware of The Classic Adventurer fanzine. Made by Mark Hardisty in late 2018, it's a love letter to all things text adventures, from its lovely covers to its engaging articles.

"I've been a huge fan of text adventures since owning an Acorn Electron," Mark tells us. "It wasn't the greatest machine for games, but it did have a raft of adventure games, including one of the best adventures of all time (with graphics!) – Twin Kingdom Valley from Trevor Hall". Those early days resonated strongly with Mark and eventually he decided to do something about it. "I toyed with the idea of a 'Text Adventure Club' a blog or similar site that operated in the same way as a book club with a circle of similarly minded people, debating, playing and reviewing the same game," he continues. "At the start of 2018 I delved into the text adventure community and penned my own game on the ZX Spectrum, a homage to Fergus McNeil's The Big Sleaze, cunningly entitled The Big Sleave 2.5."



» Mark on adventure games. "[Gamers] wanted a more cerebral experience beyond shooting space aliens."

> **"The exercise was never about making money"**
> Mark Hardisty

The game went down well and Mark's plans for a club soon changed into a standalone book that saw him tracking down suitable developers and contributors. Despite being a niche genre, Mark has no trouble finding developers to interview. "I've a few good friends who run sites dedicated to various machines so many of them had already done some of the groundwork required tracking down authors for distribution permissions and so on," he continues. "A few people disappointingly didn't want to revisit that part of their life, a few didn't respond, and a few others were more difficult to track down, notably Anita Sinclair of Magnetic Scrolls who I managed to convince to do her first interview in almost 20 years."

Despite the impressive roster of text adventure-themed talent that he's so far featured within the magazine Mark still feels like he has a couple more mountains to conquer. "There's a few authors from my own selfish point of view that I'd love to interview – Simon Ainsworth (The Greedy Dwarf), Philip Mitchell (Sherlock) and Tony Barber (Valkyrie 17) to name three," he says. "There's still the rest of the Magnetic Scrolls team, and some others such as St Brides, Clem Chambers and Rod Pike (CRL) and Sean Ellis (The Graphic Adventure Creator) – but they have been interviewed in-depth elsewhere, including with yourselves at **Retro Gamer**."

» Mark had originally planned to release The Classic Adventurer in book form, but soon realised it made more sense to split it across four issues.

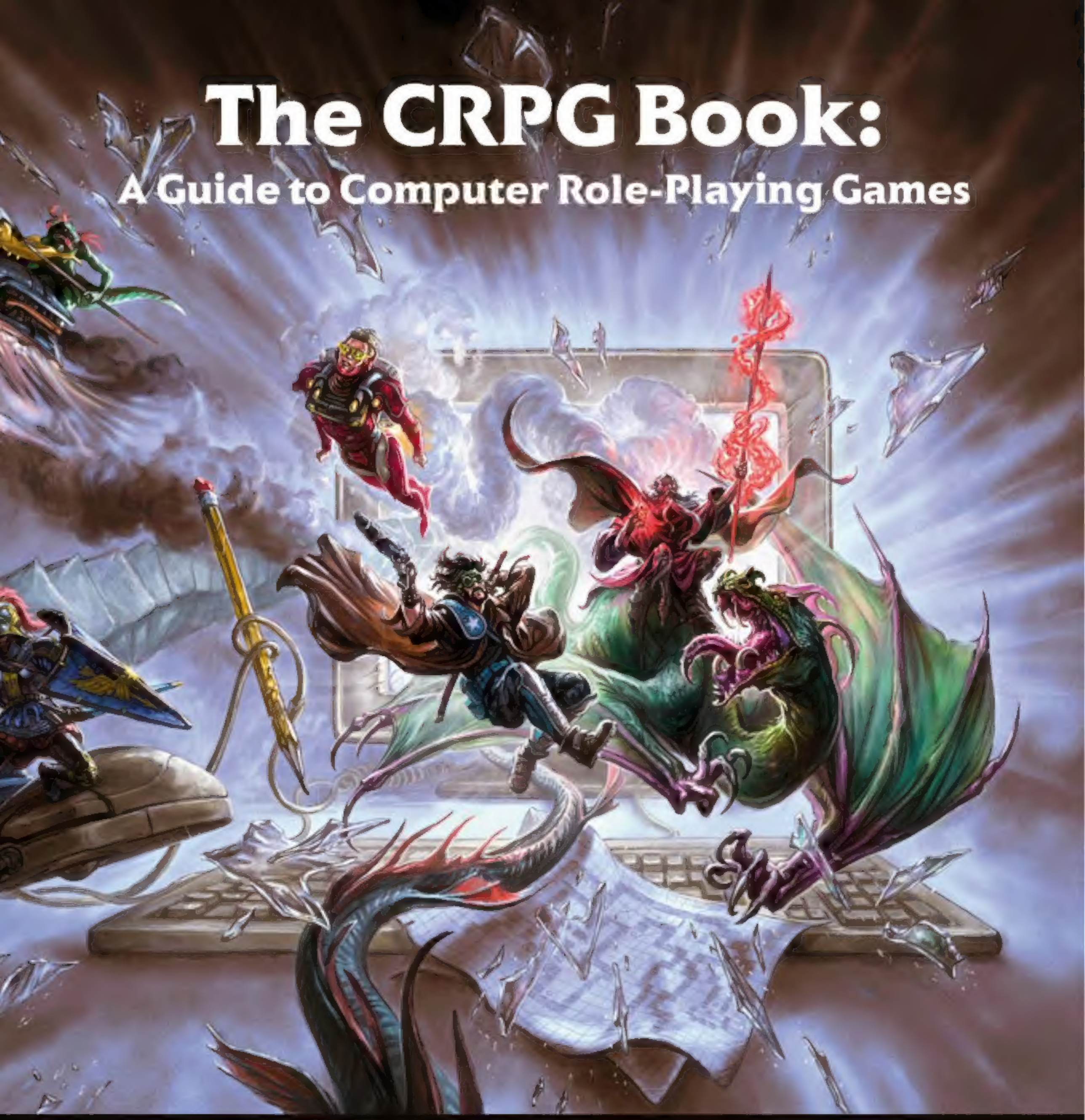
» Mark recommends you play The Hobbit. "It has a great story, balanced puzzles, a decent vocabulary, a complex parser and intelligent nonplayable characters with emergent behaviour."

» Mark has interviewed a number of classic developers, including Gareth Pitchford.

Equally impressive is Mark's decision to give away PDF versions of the mag for free and his answer highlights that it's the love of the genre that caused Mark to create The Classic Adventurer. "It's because of the cost of print-on-demand," he says. "The exercise was never about making money, it was about finding an outlet for my interest in the genre and a celebration of British authors and games. I'm not sure how many copies have been printed, but the download figures are pretty good, heading towards 10,000 across the four issues last year, which is remarkable. I'm delighted it's reached such a wide audience and that the fans of the genre have provided me with a lot of kind feedback. It's been very rewarding."

The CRPG Book:

A Guide to Computer Role-Playing Games



Spread over more than 500 pages, The CRPG Book: A Guide to Computer Role-Playing Games reviews over 400 seminal games from 1975 to 2015, covering the role-playing classics we all know and love.

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retro radar THE VAULT

THE COOL RETRO STUFF THAT WE'VE HAD OUR EYE ON THIS MONTH

A Profound Waste Of Time

If you were unlucky enough to miss the original Kickstarter release you'll be pleased to hear that this loving tribute to all things videogames has now been republished. While it does focus on contemporary indie games, there's still some solid retro-based content to enjoy, particular the excellent look at Sega Technical Institute. It's gorgeous to look at too, with every page being a delight to thumb through.

Price: £20, £30 glow in the dark edition (featured)
From: apwot.com

Pac-Man Quarter Arcade

Make no mistake, this latest offering from Numskull may be expensive but we'd argue that it's worth every penny, particularly if you're a massive fan of the ghost gobbler and can't afford an original cabinet. The craftsmanship behind the machine is superb and feels resoundingly solid to the touch, while the joystick holds up well to extended play periods and is never painful to use. All the artwork is meticulously recreated, while the emulation itself appears faultless. It's a shame that you can't use real coins on the cabinet, but that's our only real quibble. Here's hoping other companies follow suit. We'd absolutely love a quarter-sized OutRun cabinet.

Price: £149.99 **From:** geekstore.com

Women In Gaming: 100 Professionals Of Play

This excellent tome by Meagan Marie does a fantastic job of celebrating the many unsung developers of the games industry. While the vast majority of developers are from 2000 and beyond there are plenty of key figures from the Seventies, Eighties and Nineties that are featured, including Carol Shaw, Dona Bailey, Rieko Kodama, Carol Kantor and Christy Marx. It all makes for a fascinating read.

Price: £12.71 **From:** amazon.co.uk

Castlevania: Symphony Of The Night Soundtrack

We've been awaiting this Mondo release for ages now and it doesn't disappoint. Presented in a stunning gatefold, it features fantastic art by Jasmin Darnell and is pressed onto blood red vinyl. It's a comprehensive offering too, due to featuring seven bonus tracks that were exclusive to the Sega Saturn version of the game, as well as the excellent original PlayStation compositions.

Price: £37.35
From: amazon.co.uk

Retro Wifi SI

This modem allows you to get a variety of retro computers online via your wireless network. The modem is powered by Micro USB and connects via the RS232 port (we needed an adaptor for the C64 user port, too). You can do anything you could do with a regular modem on those computers – we loaded up Striketerm and went browsing BBSes.

Price: £32.99
From: simulant.uk

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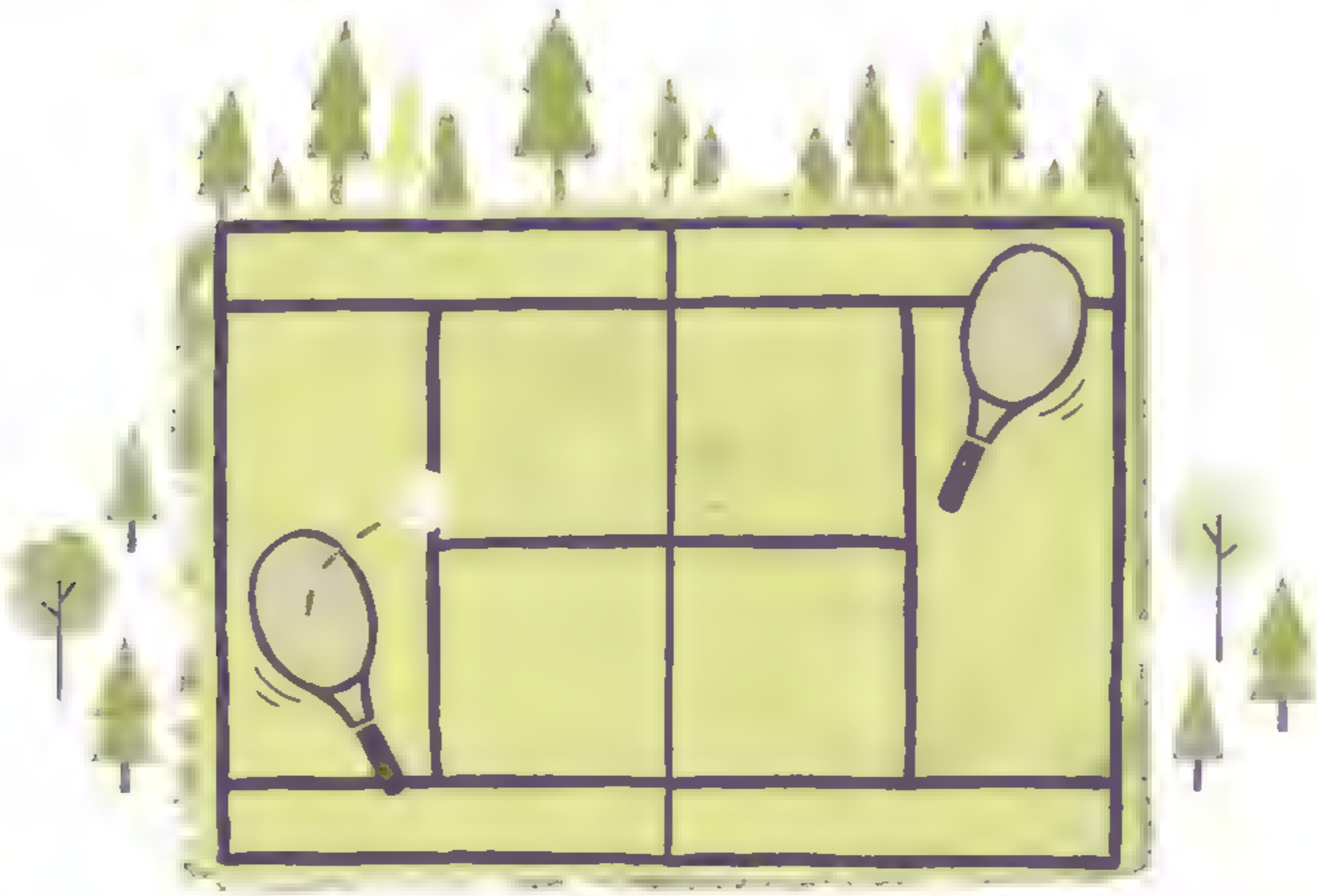

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UNFAO, Global Forest Resources Assessment 2005-2015

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TWO SIDES

Here's my bio... Paul Rose
Paul is probably better known as Mr Biffo the creator of legendary teletext games magazine Digitiser. These days, he mostly writes his videogame ramblings over at Digitiser2000.com. If you want more Biffo in your eyes, you can catch him as the host of Digitizer The Show at www.bit.ly/biffo2000

LCDelights

Something I really miss from gaming is standalone systems. By that I mean the sort of single-game, handheld and tabletop, LED and LCD games you used to get from the likes of Grandstand and Tomy, as well as – of course – Nintendo's Game & Watch series.

These sorts of simple games you'd find today on smartphones – and gone are the days when you'd get a reasonably convincing, bleeping, blooping, flashing Space Invaders or Pac-Man clone on a standalone electronic device.

Indeed, Nintendo has – on and off – fashioned these one-idea gameplay experiences into its WarioWare series, where gameplay that would've once been priced at a premium, and considered enough for a standalone product, is now rushed through in seconds. It feels throwaway, but I suppose that's kind of the point.

It's such a missed part of gaming for me, because it was rarely about the actual game. What I loved, what drew me in, was the design of the hardware itself. Let's face it, the technology wasn't up to much, they'd have to find other ways to tempt customers, as they browsed through their mum's Argos catalogue, but that was all part of the experience for me.

Often these games, such as Coleco's range which included such licensed staples as Donkey Kong, Frogger and Galaxian, were housed in scaled-down arcade cabinets. Others, such as Tomy's Tomytronic 3D range, did stereoscopic graphics years before Nintendo's 3DS. They were aesthetically beautiful, felt great to just hold, but it was Grandstand's Astro Wars – originally sold in Japan by Epoch, under the name Super Galaxian – that really hooked me on the power of plastic. Ironically, you can now buy a pretty spot-on recreation of it on the Apple Store, but for me that misses the point.

There was something mysterious about its huge, circular lens, which magnified and subtly distorted its LED backdrop. Something tactile about its teeny tiny joystick, and oversized fire button. It looked more like the sort of apparatus you'd find in the back of a Jack Kirby Fantastic Four comics panel than a videogame.

In a bid to stand out on the shelves, throughout the Eighties and early Nineties, these electronic games became ever more complicated and ambitious. Many of them caught my attention, that's for sure.

Some of them were huge, Tiger produced two ridiculously oversized tabletop versions of Sega's After Burner and Out Run, which I coveted but never owned. Out Run had a full steering wheel and a tiny LCD screen shoved into a plastic dashboard and front half of a car, but After Burner took things to an even greater extreme, with its full aircraft control panel and massive flight yoke (still with a screen you had to squint at to see properly).

Indeed, Tiger had a bit of thing for shrinking Sega's state-of-the-art arcade games. In 1996 even releasing a semi-handheld attempt at recreating Virtua Cop, complete with a miniature lightgun. I mean, obviously it was terrible, but there's something to be said for these brave follies, and in an era where gaming hardware does its utmost to not draw attention to itself, to me they feel like an unjustly forgotten and overlooked part of our gaming history.

> "Something I really miss is standalone systems - the sort of single-game, LED and LCD games you used to get"

Do you agree with Paul's thoughts? Contact us at:
RetroGamerUK | @RetroGamer_Mag | darran.jones@futurenet.com

Spectrum Cinema

Italian director Paolo Santagostino tells Paul Drury all about his Jet Set Willy film

Paolo Santagostino, a video editing teacher at the Civic School Of Cinema Luchino Visconti in Milan, Italy, has produced a beautiful animated film about Matthew Smith using the Jet Set Willy game engine It will premiere in Manchester on 4 May at the Play Expo show and both Paolo and Matthew will be in attendance for a post screening Q&A

» Matthew Smith was still a teenager when he first started making computer games

We assume you have a soft spot for Jet Set Willy?

It was the first game I fell in love with It was 1984, I was 11 years old and my older brother Carlos brought the game home We were both Manic Miner fans, of course, but what we loved most about Jet Set Willy was the freedom You could choose your own way to clean the rooms or forget the cleaning mission and just explore We start drawing maps and it was just incredibly exciting

When did you decide to make a film about the game?

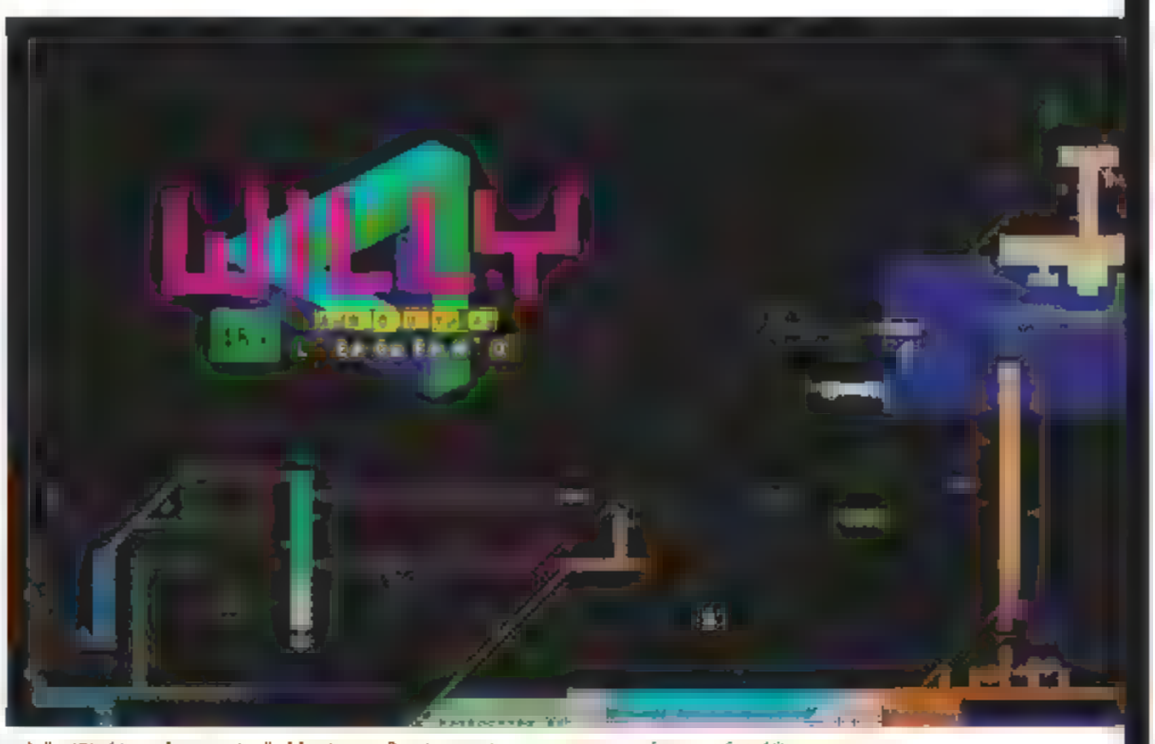
In 2008 I discovered the 'Spectrum Diamond' documentary on YouTube and was very impressed by it I did a lot of research into Matthew's story In 2014, I bought a smartphone version of Jet Set Willy and had the idea of making a 'living map' with all the monsters walking in it and this transformed into an animated documentary about Matthew It took over three years to make and if you put all the hours together, I spent something like nine months of eight hour days working on it

What sort of feedback have you had so far?

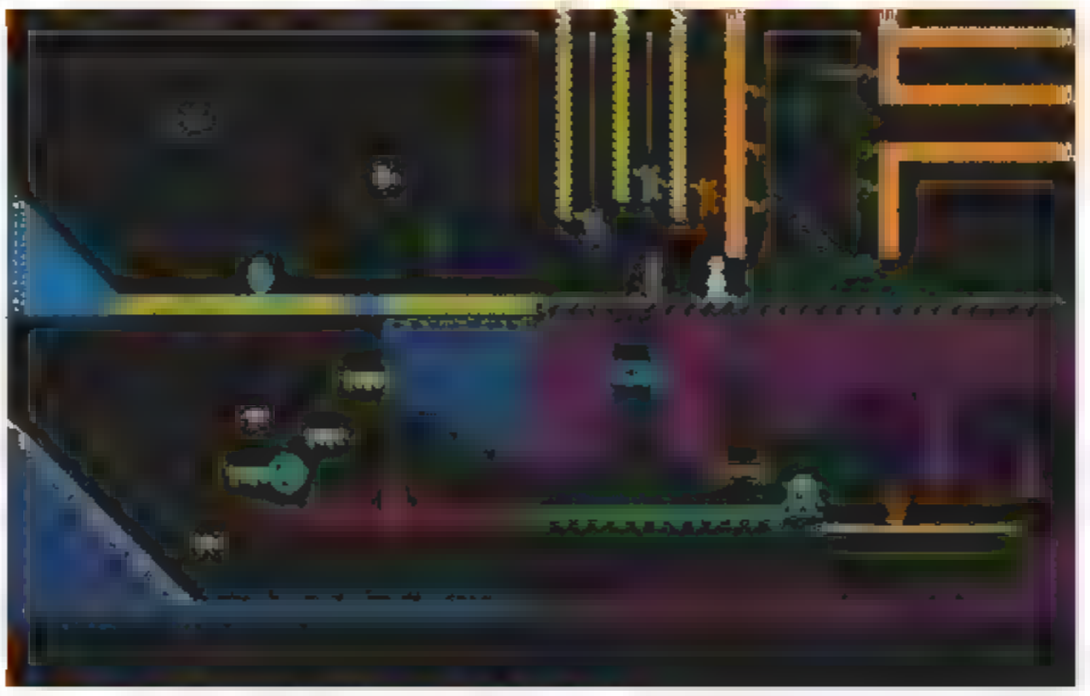
Chris Cannon, one of the lead voices you can hear in my film and who worked with Matthew at Bug Byte Software, told me that he particularly liked how the map zooms out as it really gives an idea of the scale of the game, something that playing it, or even mapping it on paper, fails to do justice to. In general, all the JSW fans [have been] very impressed by the film, but I really wanted to make something that can 'talk' to people who don't know anything about the game or Matthew

What are your hopes for the premiere of the film in Manchester later this year?

I want to invite all the people who are working hard to keep the JSW community alive and give them the opportunity to meet Matthew in person . and enjoy my film at the same time! Lots of people not only still play the game but also use the different JSW editors to make 'mods' – beautiful, complete new games We will be showcasing the best [at Play Expo] and people can vote for their favourite Matthew not only wrote the book on how a platform game should be, he also created a 'format', a 'Willy World', that everybody can [use] to create their fantasy This makes him a living 8-bit legend



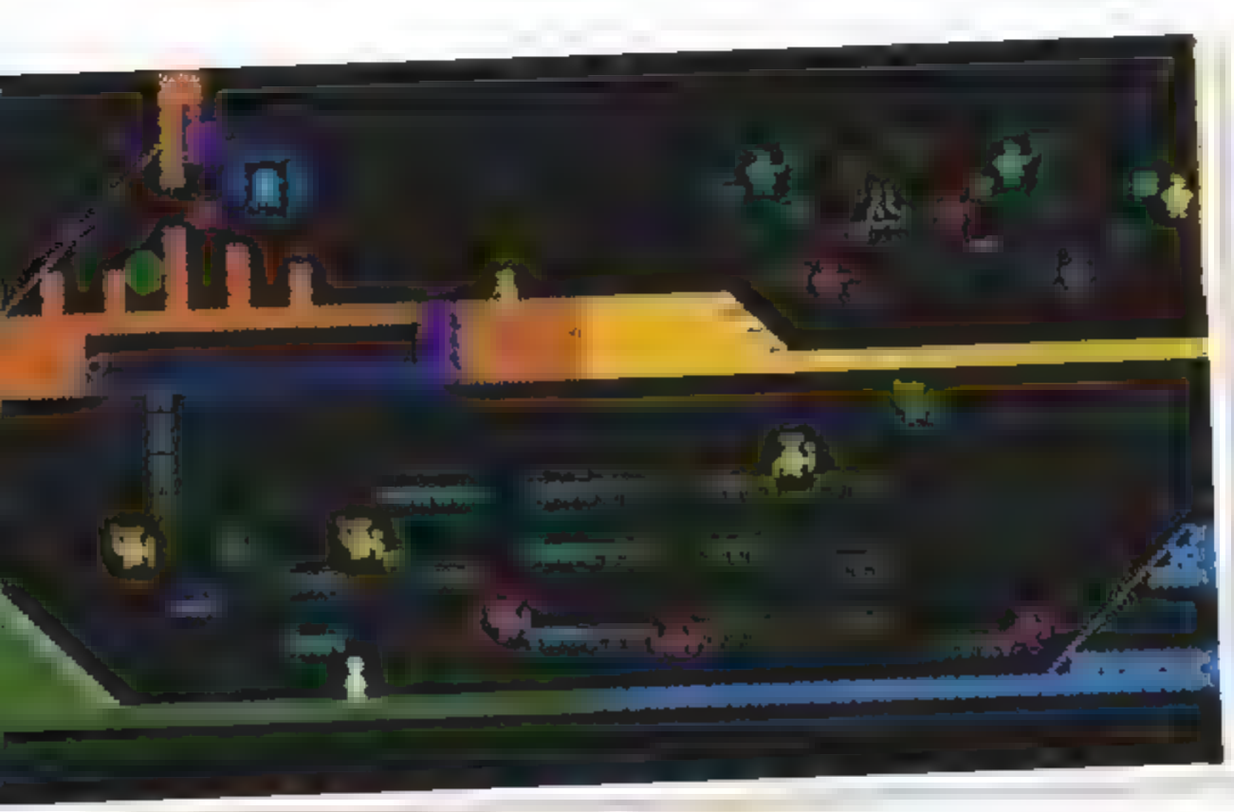
» Willy 48K: About A Legend tells Matthew Smith's story by ingenious use of the Jet Set Willy game engine



» There was definitely a boat-like feel to the architecture of the mansion

How do you feel about finally getting to meet Matthew Smith?

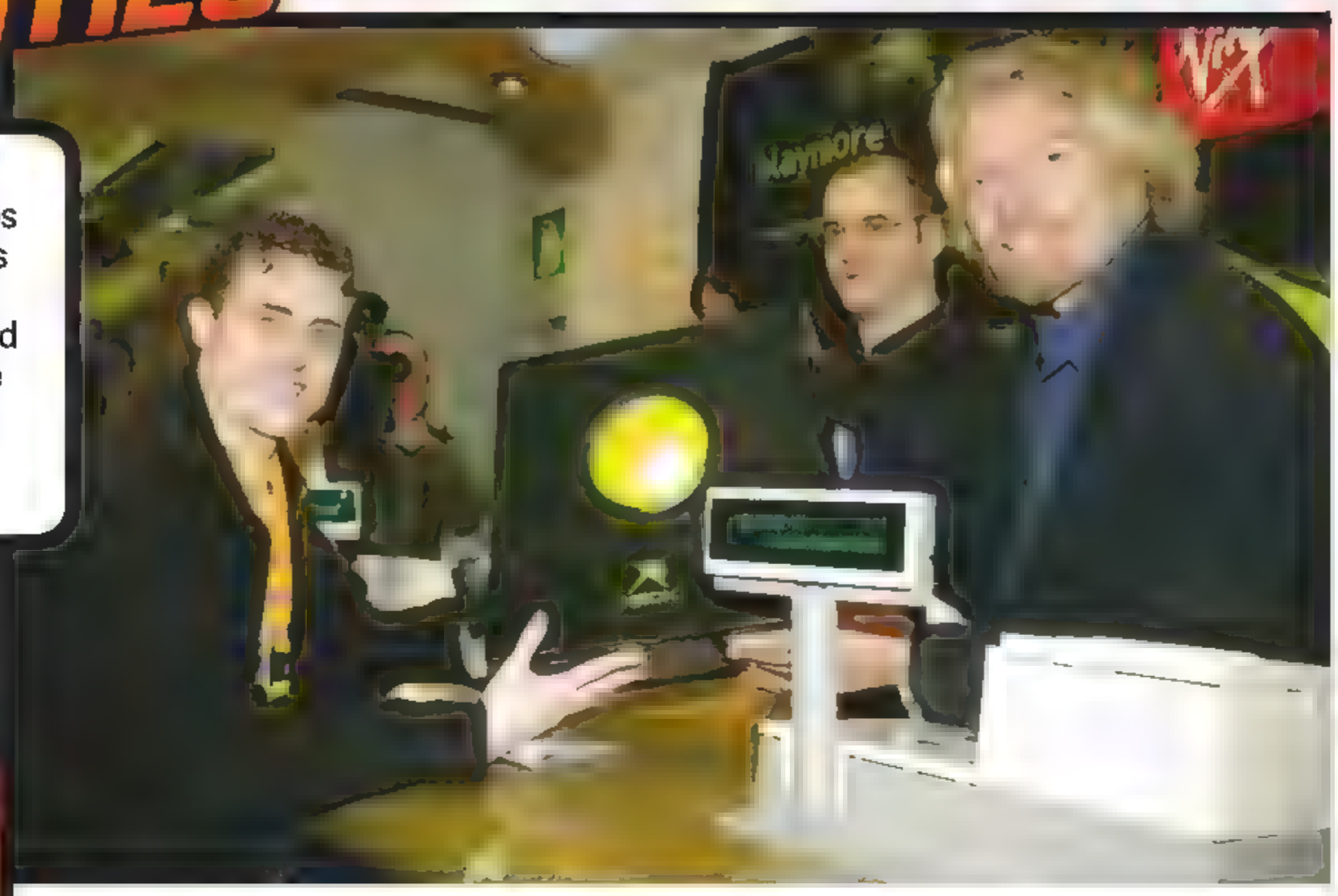
I'm a bit nervous, as you can probably understand I'm curious to know what a typical Matthew Smith day is like, what he is doing, if he still plays games but most of all I hope he is happy right now, after all the shit he went through I know that the young Matthew drew the first pictures for Manic Miner in Italy and I'm proud that the adventures of Miner Willy in some way started in my country I will ask him about that holiday in Italy, if he still remembers . and I'm not going to ask him when he will finally release Attack Of The Mutant Zombie Flesh Eating Chickens From Mars! ★

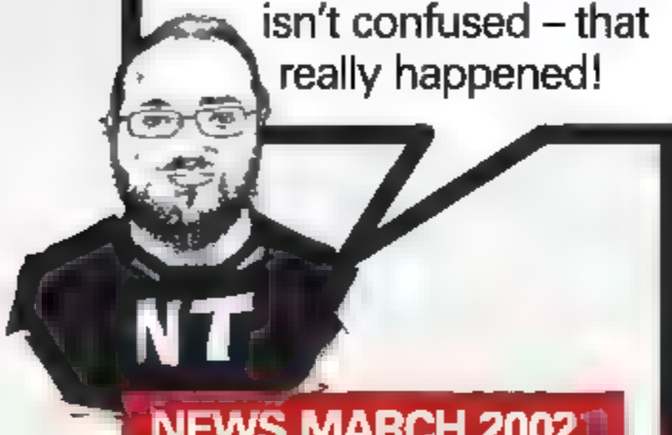


» Mad mixers and swinging sixties Willy's mansion is full of surprises

Play Expo takes place 4 May and 5 May 2019 at Manchester Central Exhibition Complex See playexpomanchester.com for tickets and more information

BACK TO THE NOUGHTIES





MARCH 2002 – Bill's big black box belatedly barges into Blighty, Nintendo tells us when we can buy our GameCubes, and Amstrad brings Sinclair back to the market. No, Nick Thorpe isn't confused – that really happened!

NEWS MARCH 2002

On 21 March, Amanda 'Milly' Dowler went missing on her way home from school in Weybridge, Surrey. The teenager had been eating with friends, but disappeared after calling her father to say she'd be home soon. A major search operation began, with over 100 police officers and many volunteers looking in nearby streets and fields. By the end of the month, Superintendent Alan Sharp felt that it was "much more likely Amanda has gone with someone she knows than she has been taken by force", due to a lack of reports of any struggle in the area where she went missing.

The 74th Academy Awards ceremony took place on 24 March. Big winners included A Beautiful Mind, which won four awards including best picture and best director, and The Lord Of The Rings: The Fellowship Of The Ring, which won four awards from 13 nominations.

The Queen Mother passed away at the Royal Lodge on 30 March, at the age of 101. As the wife of King George V, she had been Queen consort from his accession to the throne in 1936 until his death in 1952. She remained a popular member of the royal family after her daughter Elizabeth II became the queen of the United Kingdom on 6 February 1952, and was active in public engagements up until late 2001.

THE LATEST NEWS FROM MARCH 2002

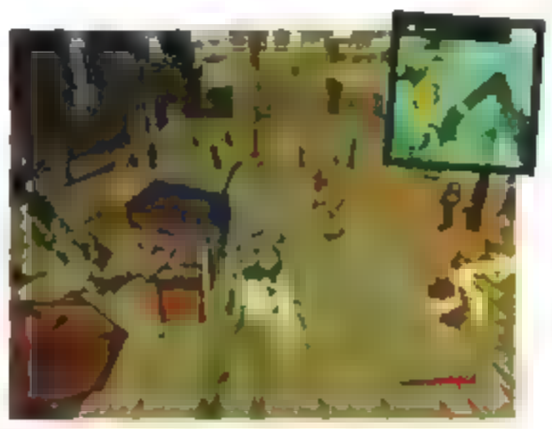
The Xbox finally touched down in PAL territories this month, with the UK launch party held at Virgin Megastores – indeed, Richard Branson himself sold the first console in the country. It certainly wasn't cheap at £300, but games such as Halo, Dead Or Alive 3 and Oddworld Munch's Oddysee helped to sell the new machine. Microsoft inevitably claimed that the launch had been a big success, which had seen the console experience a "near sell-out" during its first day of availability. However, before the end of the month, Microsoft issued a statement claiming there were "no stock shortages" despite "strong demand", although reports questioned the alleged strength of that demand.

Official Xbox Magazine also launched this month, and felt the launch line-up praiseworthy. Of the eight games reviewed, Halo unsurprisingly came out on top with a score of 9.7/10. Project Gotham Racing, Amped, Dead Or Alive 3, Rallisport Challenge and Oddworld: Munch's Oddysee all scored above 8/10, leaving Fast Mad Dash Racing (6.5/10) and Fuzion Frenzy (4.5/10) as the less desirable titles. Also arriving this month was Jet Set Radio Future, the sequel to the cel-shaded Dreamcast favourite. Sega's sequel earned an 8/10 score from Edge, which praised the game's visuals, environments and Graffiti Soul challenges, but criticised it for poor AI and a lack of challenge. XBM scored it 9/10, drawing attention to how Smilebit refined the structure of the original by keeping race, combat and tagging sections separated from one another.

Nintendo also got around to giving the GameCube an official European launch date of 3 May and a suggested retail price of €250/£150, though Edge reported that UK retailers were ignoring this and favouring a higher £170 price point. Even at the higher price point, Nintendo's machine would still become the cheapest console on the market at launch, with the PS2 still selling at £200 since its September 2001 price cut. According to NGC, Nintendo was preparing roughly 500,000 GameCubes for launch in the European market, meaning 50,000-80,000 for the UK.

On the software front, the star of the month on Nintendo's platforms was one Sonic The Hedgehog – once an unthinkable prospect. Sonic Adventure 2: Battle was just arriving on the GameCube in the USA and Sonic

PS2 – co didn't attract much of an audience, despite critical praise. A later PS3 re-release corrected that.



Xbox: Jet Set Radio Future grinded its way onto the Xbox, and the critics were impressed.

THIS MONTH IN...

XBM

In an interview about Xbox Live, Microsoft's J Allard pulls no punches about people's internet browsing habits. "Today broadband demand is being driven by convenience. Now you can order books faster [...] or view porn faster." And in the future? "[Online gaming] is how they're going to be able to sell broadband." So not porn, then.

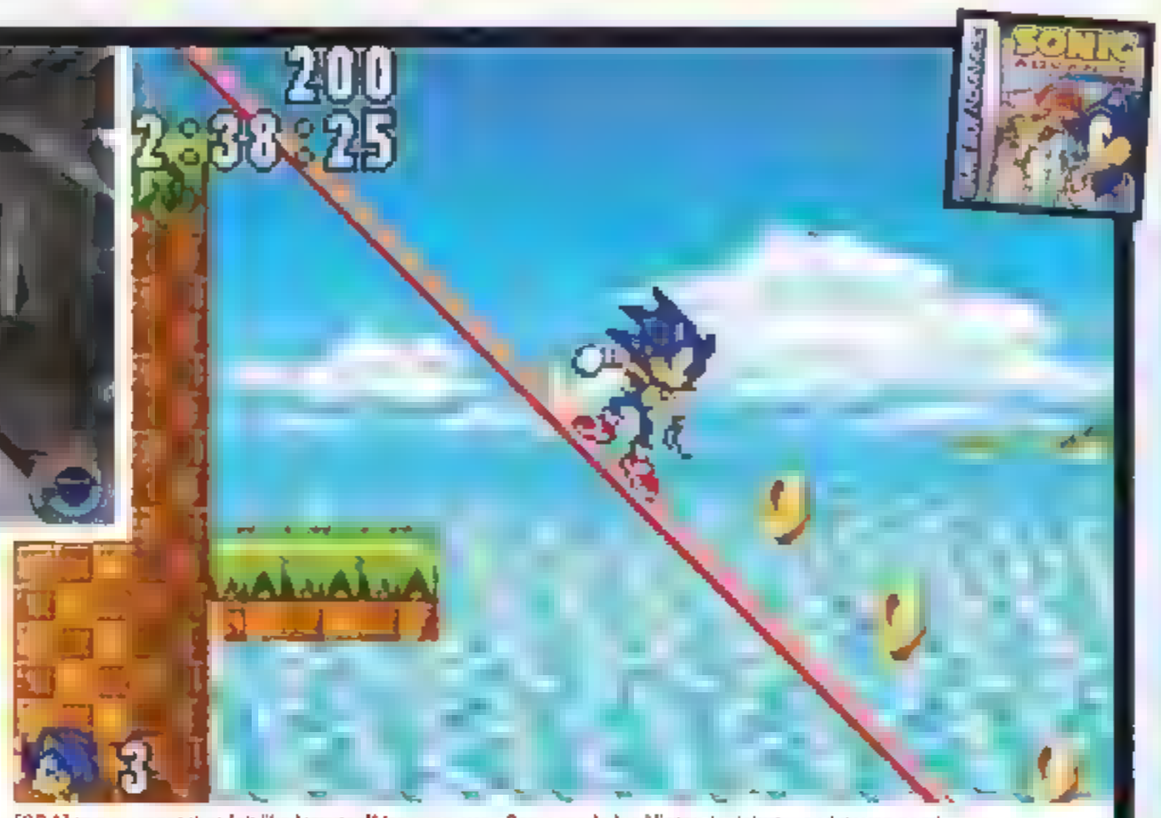
PC Gamer

The Playing Fields, a major name in the early days of LAN gaming in the United Kingdom, closed due to bankruptcy after just under five years in business. In its last year of life, the London-based centre had 20 high spec PCs, a two-megabit internet connection and a bar. "History will tell whether we made a difference," said the founders.

Cube

Nintendo had begun requiring developers to ship game previews not as discs, but as whole NR Reader test units with the discs locked inside, Cube reported. This was apparently a drive to combat piracy, and the kits (referred to by the magazine as "chastity belts") cost $35 each. Interesting, but of little consequence to casual readers.

PC: PC Gamer doesn't often breach the 90% barrier, so you knew Jedi Knight was a bit special.



[GBA] In a moment that felt like Hell itself freezing over, Sonic made his Nintendo debut – and it was good.

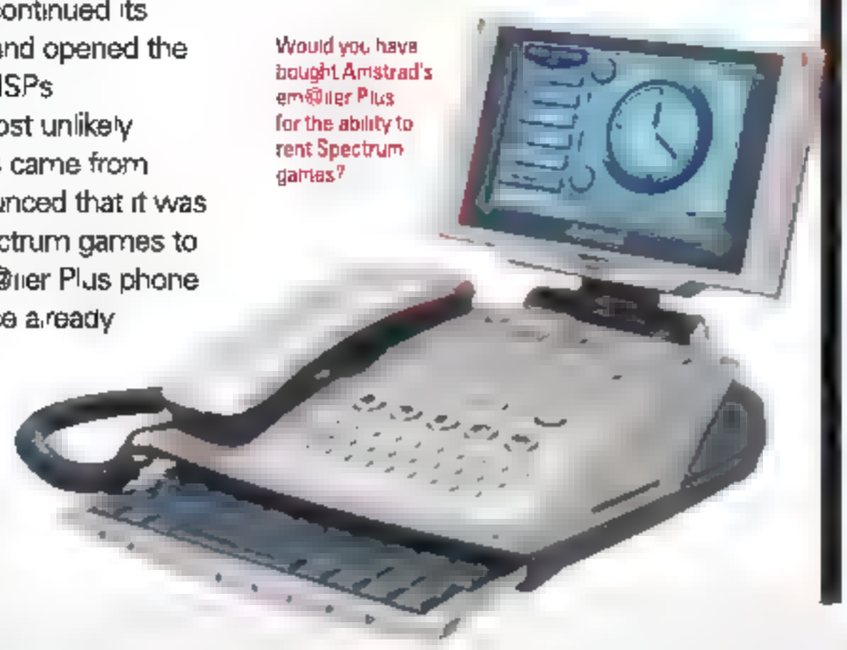
Advance made its JK debut. Cube awarded the latter 9.1/10, praising the game's return to Sonic's 2D roots, and NGC gave it 4/5, describing it as a "welcome return to form for Sega's mascot". The next best games available were retro rebound Mortal Kombat Advance (7.2/10, Cube) and Punch Out!! alike Boxing Fever (3/5, NGC).

Platforming was the theme of the month for PS2 owners. Edge re-reviewed Ico for its PAL release, again scoring it 8/10, while Play's Will Johnston awarded the game 90%. George Walter offered a 9/10 review in the Official PS2 Magazine, declaring it a "startlingly humanistic adventure that melts the heart and rewards lateral thinking". Despite such high praise, it didn't make much commercial impact. Capcom's Ghosts 'N' Goblins successor Maximo got 8/10 from Official PS2 Magazine and 85% from Play. In the latter, Simon Cann commented, "Given some of the disastrous attempts to take successful 2D games into the third dimension, Maximo is a triumph." Core Design's shepherding puzzle game Herdy Gerdy didn't fare quite so well. It earned 8/10 from Official PS2 Magazine, which enjoyed the originality, but just 6/10 from Edge, which criticised its wayward camera and unreliable AI.

On other formats, PC Gamer's editor Matt Pierce was thrilled by Star Wars Jedi Knight II: Jedi Outcast this month, awarding it 92% on the basis that it included all of your favourite scenes from the films (unless you were partial to "Ewoks or floppy-eared CGI imbeciles"). First person shooter Command & Conquer Renegade was a big name disappointment, scoring 47%, but the upstarts at Introversion Software teased an 80% score out of Kieron Gillen for their hacking game Uplink. Even Dreamcast owners still had something to celebrate, as Phantasy Star Online Version 2 arrived to an 8/10 score from Edge. However, you'll have needed the DreamKey 3.0 browser to play it, as Sega discontinued its DreamArena service and opened the console to third-party ISPs.

But the month's most unlikely piece of gaming news came from Amstrad, which announced that it was to reintroduce ZX Spectrum games to the market via its em@iler Plus phone. The £99 landline device already featured a keyboard and monochrome display in order to support its internet and email capabilities, so it was easy to add the retro games. Users could rent any of the 25 initial games at a cost of 12p for an hour or 50p for three days, using between two to five blocks of the machine's 35 block memory. Explaining the move, Simon Sugar told Edge, "We felt it was time to celebrate the roots of what exists today. The industry has come a long way and retro gaming is proving extremely popular, with an increase in demand that looks set to continue."

Join us again next month, when Hasbro will undoubtedly reintroduce Colecovision games on a toaster.



Would you have bought Amstrad's em@iler Plus for the ability to rent Spectrum games?

CHARTS

MARCH 2002

PC

1. The Sims: Hot Date (EA)
2. Championship Manager Season 01/02 (Eidos)
3. Harry Potter & The Philosopher's Stone (EA)
4. Return To Castle Wolfenstein (Activision)
5. The Sims (EA)

PLAYSTATION

1. Grand Theft Auto III (Take 2)
2. Max Payne (Take 2)
3. Rayman Revolution (Ubisoft)
4. Pro Evolution Soccer (Konami)
5. James Bond: Agent Under Fire (EA)

MUSIC

1. Anything Is Possible/Evergreen (Will Young)
2. Me Julie (Al G & Shaggy)
3. Whenever Wherever (Shakira)
4. Ain't It Funny (Jennifer Lopez)
5. How You Remind Me (Nickelback)

FILM

1. Blade II
2. Ice Age
3. All Or Nothing
4. Crossroads
5. Ocean's Eleven

1UP
3640

HIGH SCORE
10000

CREDIT 3

Amidar

KONAMI GETS THE JUMP ON NAMCO

» ARCADE » 1981 » KONAMI

One of the great things I loved about visiting my local arcade in the Eighties was that there was always something new to discover And even if there wasn't anything particularly innovative at Quay Amusements there was always a new game that was prepared to put its own spin on an existing release that made it feel like a new experience

One such example for me was Konami's Amidar, a lovely take on Pac-Man that took the core concept of gobbling pellets up and pulled it in a whole new direction You're now an ape or a paint roller being pursued by angry headhunters or pigs (they alternate across odd and even stages) and you must not only collect all the on-screen pellets but also fill in the numerous black squares and rectangles that appear on each stage You've only got one defence, but fortunately it's a good one – pressing the jump button flings enemies into the air allowing you to scuttle underneath them Unfortunately, you can only use this useful tactic three times per stage, so careful consideration is needed Additionally you can turn the tables on your attackers by filling in the corners of each grid Doing this gains you a brief window of opportunity to topple your pursuers

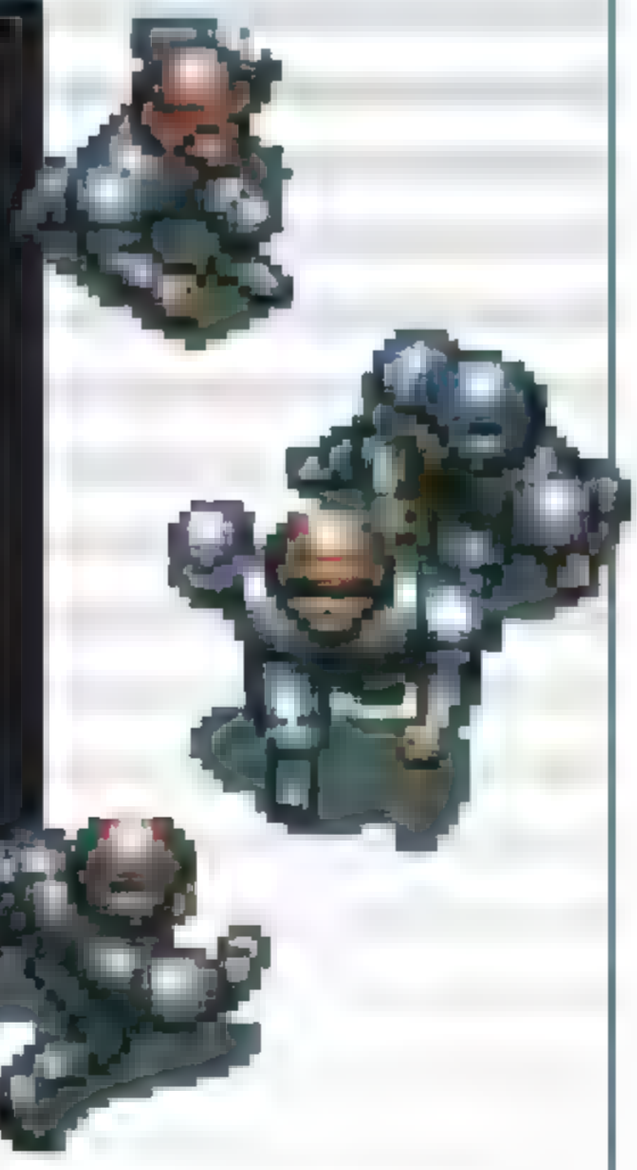
I absolutely adored Amidar and played it whenever I could I loved the cute-looking visuals, loved the alternating stages where you moved a roller around the stage (making sure that you didn't run out of paint as you went) and loved the little bonus game that saw you trying to feed a hungry pig I had no idea that the concept and name of the game was derived from a Japanese lottery method called Amidakuji, I just knew that it was a lot of fun to play Needless to say I excitedly looked for a conversion of Amidar when I eventually got an Amstrad, but was disappointed to find out that one didn't exist The nearest thing I could find was Oh Mummy, which came free with my Amstrad CPC It was fun, but not a patch on Konami's fast and frantic arcade game ★

» RETROREVIVAL

The BITMAP BROTHERS

How the 16-bit developer made gaming cool

APRS



When The Bitmap Brothers burst on to the scene, it did so in style, not only making a series of stylish games but becoming familiar faces in the media in their bid to becoming gaming's first rockstars

Words by David Crookes

Mike Montgomery, cofounder of The Bitmap Brothers, looks to be in a good mood. It matters not that our Skype connection keeps cutting out, leaving long periods of frustrating silence. He is patient, understanding and keen to talk about the company he cofounded with Eric Matthews and Steve Kelly in 1987.

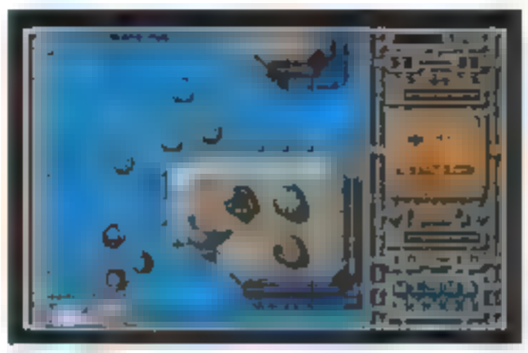
The mood, however, changes ever so slightly when we put it to him that The Bitmap Brothers was probably the first rockstar developer. He immediately picks up on a single word. "You said probably," he answers immediately. "Let's get one thing straight, we were the first rockstar developers. And it was a conscious decision to make us so."

There is no doubt that The Bitmap Brothers was achingly cool. Based in London, the small team did things their own way from the very start, quickly rallying against the trend for publishers to promote themselves at the expense of the coders, artists, musicians and designers who put in the hardest work.

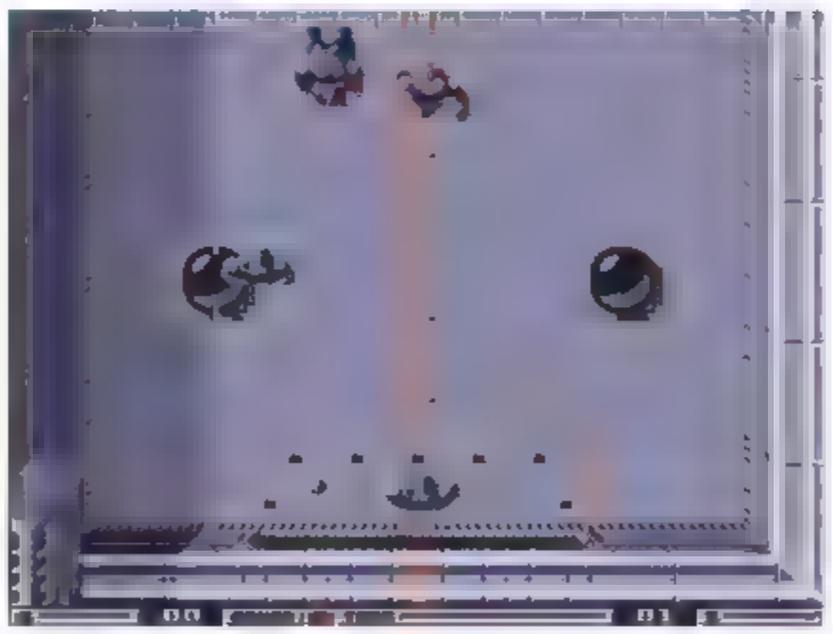
This, as Mike says, was entirely deliberate. "The publishers were taking all the credit and nobody really knew who the developers were at that time," he explains. "They just didn't want to promote the people who created the games because they feared it would make them too strong which was completely wrong." It didn't take long for The Bitmap Brothers to change that.

Indeed, just a few months later, in 1988, the developer's first game was released – the shoot-'em-up Xenon, created on the Atari ST. The Bitmap Brothers was credited on the intro screen while Eric's face appeared in at the start declaring "evil one". On the back of the box, in the bottom left-hand corner, there was mention of Xenon being a "mega creation from the Bitmap Brothers". This was just the start.

Before long, it became obvious that Xenon had become a hit, not only on all of the major 8-bit and 16-bit computers of the day, but in the arcades too. This gave the Bitmaps bargaining power for its second game, Speedball, a violent derivation of handball and American football with a stark glint of reflective steel, and the fledgling company flexed its muscle like no other developer had done before when it began to tout the title around various publishers.

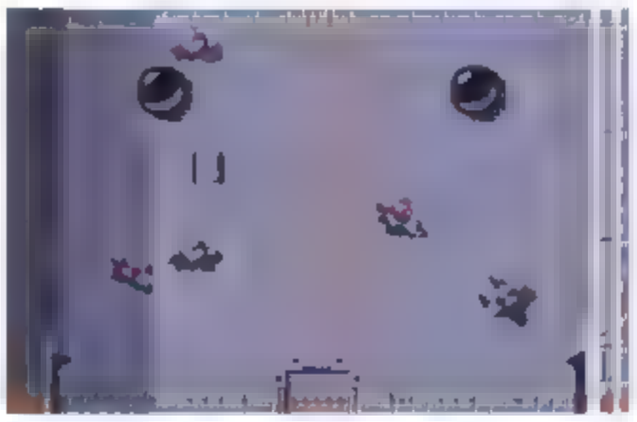


▲ Atari ST. Xenon had graphics by Eric Matthews and scored highly with reviewers.



Although a few turned the Bitmaps down, Image Works, a publishing label of Mirrorsoft which was, in turn, a division of Mirror Group Newspapers owned by media proprietor Robert Maxwell, decided to take Speedball on. Mike then listed his demands and soon Image Works had agreed to give the ▶

▲ Amiga. The award-winning Speedball took just six weeks to actually code but almost nine months to fine-tune.



Amiga Speedball 2 Brutal Deluxe was a big improvement on the original and a critical hit

"If Image Works didn't put our name on the box, then we wouldn't have worked with them"

Mike Montgomery

Bitmaps full control over all aspects of the game, from the title itself to the way it was sold in shops. It even allowed the Bitmaps to determine the size and position of its logo on the packaging.

"If Image Works didn't put our name on the box, then we wouldn't have worked with them," Mike reveals. "And if that sounds boisterous or at the very least determined – then, yes, I guess that's what we were."

A marker had been laid and it wasn't long before the Mirrorsoft marketing team was being told The Bitmap Brothers was made up of rockstar devs, prompting a major push to ensure they really were treated as such. It was, in many ways, a far cry from Mike's beginnings as a former Woolworths manager but as a firm friendship with graphics artist Eric and coder Steve grew ever closer, usually over beers in the pub, it was time for the trio to step up a gear.

Speedball was, in many ways, a perfect game on which to continue building a reputation. Making use of the artistic talents of Welsh artist Mark Coleman, a student at the Royal College Of Art, it had a unique style The Bitmap Brothers would call its own and a moody bass line courtesy of David Whittaker.

What's more, by this point, the core Bitmap team had taken up residence in Metropolitan Wharf, a converted warehouse on the north bank of the Thames. It was a large space in Wapping that Mike had picked up on a cheap annual rent and, while it meant more money could be put into game design, it was also edgy if not a little grimy – the perfect workspace for a developer keen to shake away the notion that games were made in small suburban bedrooms.

Today, such a setting would make for an ideal photoshoot, but back then

Dan Malone is a very respected artist; this concept drawing of The Chaos Engine characters shows his talent runs deep

Mirrorsoft had something else in mind. Aside from owning a boat, Robert had possession of a helicopter which would park on a landing pad atop the Mirror offices in Fleet Street three-and-a-half miles away. Rumours were that Robert would urinate from this pad on to the street below but the marketing bods at Image Works had something far less vulgar in mind for the Bitmaps (as rock 'n' roll as pissing on unsuspecting members of the public may appear at face value).

It had Mike, Eric and Steve pose with chopper, Eric exuding a pop star charm with his Ray-Ban shades, leather jacket fitted over a T-shirt tucked into a pair

The DNA Of A Bitmap Brothers Game

Identifiable Characters

The Bitmaps created many memorable in-game characters across their titles. Who could forget Zod in *Z*, Barry, Colin, Justin et al in *Speedball 2* or the Preacher, Thug, Navvie, Gentleman, Mercenary and Brigand in *The Chaos Engine*?

High difficulty

Unless you're an extremely proficient gamer, chances are that you struggled with The Bitmap Brothers' games. Mike Montgomery says the difficulty was deliberate: the developer felt nobody would enjoy easy games.

Science Fiction

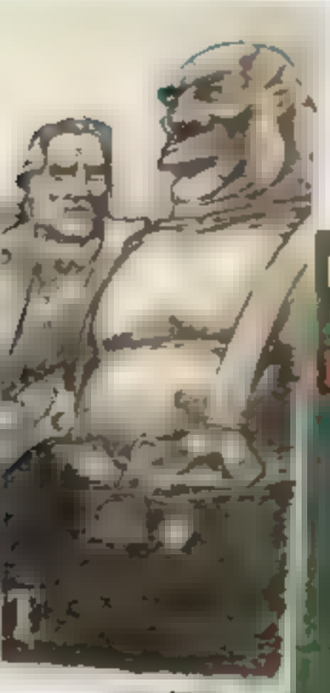
Most of the Bitmap games were a nod to science fiction and fantasy, from the space shmups *Xenon* and *Xenon II: Megablast* to *Speedball*, *Gods*, *Magic Pockets* as well as *The Chaos Engine*, with its Victorian-era steampunk styling and time-travelling plot.

16-bit machines

The Bitmap Brothers' heyday came during the 16-bit era, its games setting standards – graphically, technologically and and in terms of gameplay – for the Amiga and Atari ST.

Unique styling

Xenon, *Xenon II: Megablast*, *Speedball* and *Speedball II: Brutal Deluxe* heralded a familiar chrome-like graphical style while *The Chaos Engine* nailed down an industrial look.



Where Are They Now?

Eric Matthews

■ Eric Matthews left The Bitmap Brothers after designing *Z: Steel Soldiers* in 2001 and he became the design and content manager for Sony Computer Entertainment Europe. After working on a string of *EyeToy* and *SingStar* titles, he became SCE's creative director for the London and Cambridge Studios and took his place as senior director of SCEE's Worldwide Studios Europe, eventually becoming vice president, a role he remains in today.

Mike Montgomery

■ Montgomery retained the rights to the Bitmap Brothers' games and he has overseen the release of *Speedball 2 Evolution*, *Z* and *The Chaos Engine* in recent years. In 2004 he teamed up with his long-standing friend, Sensible Software's Jon Hare, and John Phillips to found Tower Studios, porting *Sensible Soccer* and *Cannon Fodder* to mobile phones and releasing *British Lions Rugby*. Jon Hare took sole control in 2009 and, since then, Mike has worked as a consultant and freelanced for Slightly Mad Studios on *Project Cars*.

Steve Kelly

■ Kelly worked as a programmer on *Z: Steel Soldiers* and left The Bitmap Brothers shortly afterwards. From that point on, he didn't code another game and he is understood to be currently working in web technologies. There is very little information about him post-Bitmap; indeed, like Matthews, he did not consent to interviews in the excellent *The Bitmap Brothers: Universe* book published by Read-Only Memory, leaving a few potential stories untold.

of skinny jeans. Steve stood to the left, leaning on the machine, while Mike, assumed a moody look of indifference. Suddenly, rather than just have a bunch of screenshots to print, editors had faces and the kind of shot music mags would print. These guys weren't hunched over keyboards in their tiny, dimly-lit rooms, the narrative went. They were flying high. Rich. Successful. And cool.

It could have been different. Eric told Amiga Power magazine that C&VG had wanted to perch the lads on top of an arcade machine and have them wear space helmets for a photo to accompany Xenon. By doing things their own way and having their own photographs taken, they were able to manipulate their own positive image and not, as Eric said, look like "plonkers".

In reality, however, life was a different beast and what was also intended as a little mickey taking – a swipe against the all-too sensible gaming whiz-kids – became accepted as truth. "But we never actually had enough money," says Mike. "Sadly we may have been the popstars but the David Darlings of the early industry were the multimillionaires. We put so much money into development that we didn't make much personal money. I was driving around in an old banger when that photograph with the helicopter was taken."

Despite that, the Bitmap's star had risen and the developers were enjoying their time in the spotlight. Speedball earned itself a prestigious Game Of The Year award for the best 16-bit title at the Golden Joystick Awards in 1989 while the developers themselves were named the best 16-bit programmers.

The same year also saw the release of the vertically scrolling shoot 'em up Xenon 2: Megablast, originally for the Atari ST and Amiga. Published by Image Works again, The Bitmap Brothers' cool credentials were cemented thanks to the game having a blistering soundtrack courtesy of Tim Simenon, a DJ known for his work as Bomb The Bass.

Like the Bitmaps, he'd emerged on the scene in 1987, his debut single, Beat Dis, consisting largely of 72 samples. It reached number two in the UK Singles Chart and Simenon followed it up with Megablast (Hip Hop on Precinct 13). Used for the Xenon sequel as both the loading music and, in more simplified form, as the background tune during the game. The hard work in sampling and resequencing the song for use in ▶

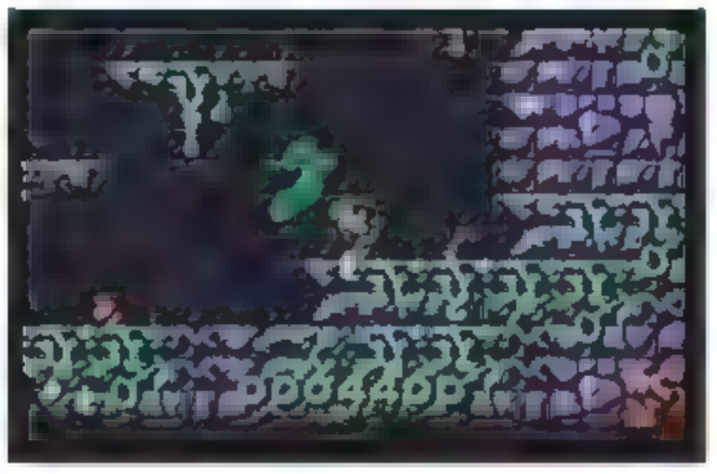
■ Amiga! Magic Pockets, released in 1991, featured some amazing sprite animation.

■ Amiga: The original The Chaos Engine was going to allow three players to co-operate with each other through levels rather than two.

■ This was the image that highlighted to gamers just how cool it was to be part of The Bitmap Brothers.

Music Maestros

The musicians that enhanced The Bitmap Brothers' games

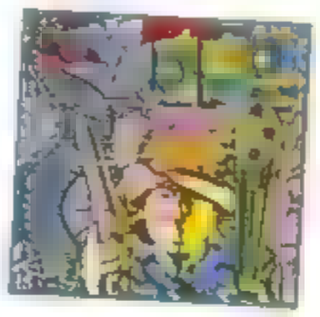


John Foxx (GODS)

■ Having started his career as the original lead singer of Ultravox, Chorley-born Foxx signed to Virgin Records and enjoyed moderate success as a solo artist with singles and albums that charted in the Top 40. After a brief spell away, he formed Nation 12 with Tim Simenon, indulging in electronica and releasing *Remember* and *Electrofear (Beast Mix)* before creating the music for *Speedball 2* and *Gods*.

Bomb The Bass (XENON 2)

■ Created by Brixton musician and producer Tim Simenon whose breakout single was the samples-based *Beat Dis* which charted at number two in the UK, Bomb The Bass' blend of house and hip-hop exploded on its debut album *Into The Dragon*. *Megablast (Hip Hop On Precinct 13)* was used in *Xenon 2: Megablast* (hence the name). Bomb The Bass went on to produce five more studio albums.



Betty Boo
(MAGIC POCKETS)

■ Perhaps the best-known of the musicians collaborating with The Bitmap Brothers, Betty Boo burst on to the scene on The Beatmasters' *Hey DJ / I Can't Dance (To That Music You're Playing)*. Her solo debut, *Doin' The Do* however, peaked at number seven in the UK charts and remains her most memorable hit. Featuring on the album *Boomania*, this song was remixed for *Magic Pockets*.

▶ the game was completed by David Whittaker and went down a storm.

This mixing of the music and game was groundbreaking and Martin Heath, who founded Rhythm King Records, was keen to keep the relationship going. "We used commercial musicians and pop stars because they knew what they were doing – they were professionals at doing these things," says Mike. "They also helped to promote our games and they gave us an edge – an edge in terms of the games we were making and the kind of marketing and promotion we sought." The vibe ensured the Bitmap's had the X-factor.

"The link with Rhythm King was great," says artist Dan Malone, who worked for Palace Software before ending up at The Bitmap Brothers in 1989. "I was really into music and clubbing and I could sense a real vibe around the place." Indeed, he fitted like a glove from both a professional and social standpoint.

> "We were constantly going out in the evenings after work, hanging out with whoever was around"
>
> Dan Malone

His graphics perfectly complemented that of Mark Coleman's and he hit off immediately with the likes of Eric Matthews and Graeme Boxall.

"We were constantly going out in the evenings after work, hanging out with whoever was around," Dan says. "Graeme liked to go out so he was a regular and we'd usually bump into the press; we'd hang out with Gary Penn [editor of The One] when he was in London and, if there was a night on, we'd go along. From my perspective, it wasn't a conscious effort to be rockstars or anything like that. It was just what it was."

Dan Malone had long been attracted to The Bitmap Brothers. "When I saw Eric's graphics on Xenon and what Mark had been doing with the other games, I really wanted to work with them. I loved Mark's style and while our colour palettes were different and our work is dissimilar, it worked well together. His work and my work created a Bitmap look and it was just a natural evolution."

Dan's first work for The Bitmap Brothers was on Speedball 2. "I spent about two or three weeks just messing around with stuff and I remember working really hard to figure out the perspective which I just couldn't get right," he says. "The idea was to be bigger and better, with a kind of isometric view at a 45-degree angle and that was tough. We needed the pitch to be twice the size. I had a lot of creative freedom."

He was able to develop his own style which emerged as the use of a flat colour with a few shadow layers. "I didn't really have a particular look that I felt I had to adhere to," he says. "We were basing it on the original game and evolving what Mark had done." Richard Joseph provided the audio and effects, working with music written by a former member of The Fall, Simon Rogers, who was working with John Foxx as part of the group Nation 12. "Richard did a brilliant job on the soundtrack," Dan affirms.

Speedball 2 was a standout game – "pure, no fluff," says Dan – and it received near-perfect reviews. It was released around the same time as Cadaver, an isometric fantasy adventure that had players navigate through levels

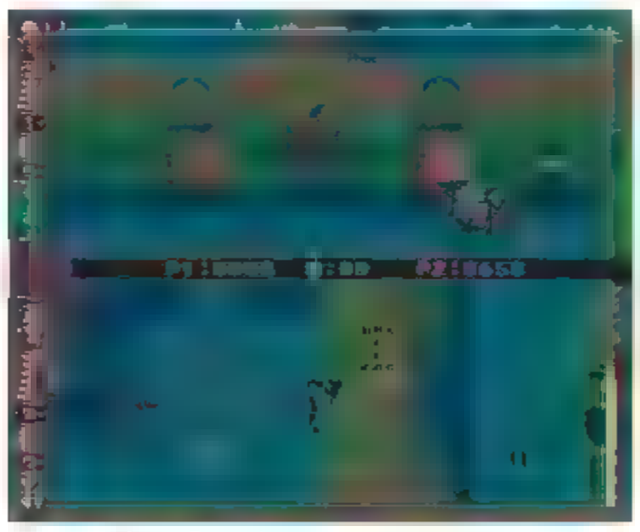
"Amiga Gods was awe-inspiring, thanks to its superb graphics, an amazing soundtrack and challenging game design

Joi (THE CHAOS ENGINE)

■ Made up of brothers Farook and Haroon Shamsher, Joi was an alternative dub/dance music duo from Bradford who formed from a desire to promote Bengali culture in East London. At the time *The Chaos Engine* was released in 1993, the pair had released its debut single *Desert Storm* and set up a club night in London. Friends with the Bitmaps, the group composed the game's original title tune

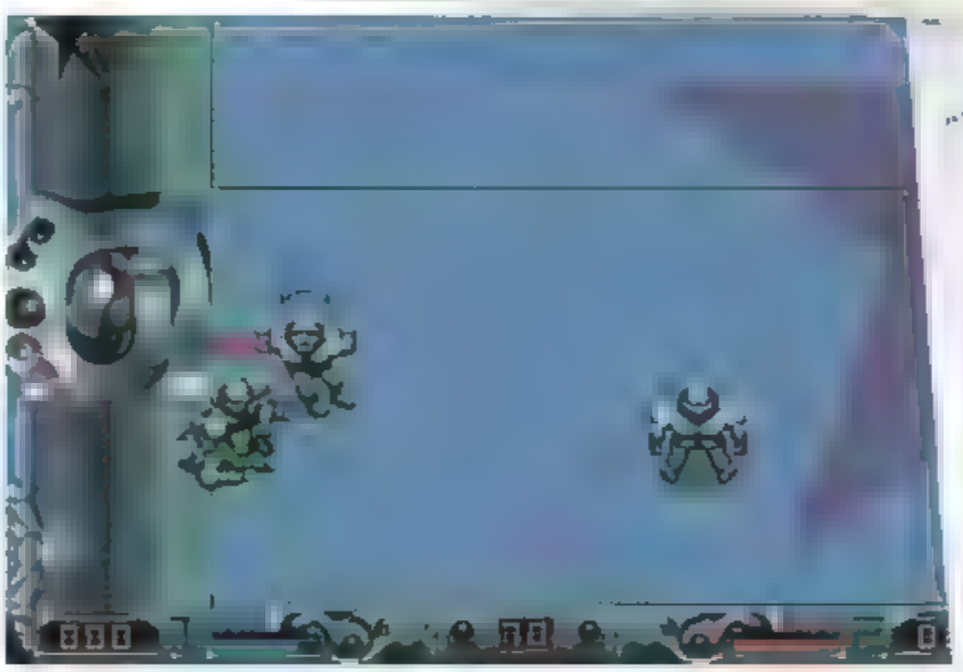
» Here's Dan Malone's concept artwork for Speedball 2's cover

» More great artwork from the brilliant Dan Malone. This time it's focusing on the stadium design of Speedball 2



» Amiga: Rather than have two players co-operating, The Chaos Engine's sequel pitted player versus player

by collecting and combining objects, solving puzzles and dispatching enemies



» Atari ST] There were plenty of different strategies to ensure success in Speedball 2

Eric said the Bitmaps were aiming for the complexity of a text adventure but with arcade-style play

It didn't perform as well as other games, however. "What we were aiming for was something like Dungeon Master – an adventure game that appeals to arcade players – but because it looks like Knight Lore or Treasure Trap, that's what people thought it was going to be," Eric explained to Amiga Power.

Not that it dented the studio's image. In 1991, the platformer Gods was launched and Nation 12 once again provided the game score. Meanwhile, comic book artist Simon Bisley drew the cover while the developers worked on AI that would take into account the player's position and their level of skill.

Designed by Eric Matthews and Steve Tall, Gods was released by Renegade, a new company set up by The Bitmap Brothers in conjunction with Heath and Adele Nozedar of Rhythm King Records and a former employee of Telecomsoft and Mirrorsoft, Tom Watson. It was in part a reaction to Mirrorsoft's demise, one of the many fall-outs of Robert Maxwell's untimely fatal plunge from his yacht, and in part a continued desire for better treatment of developers.

Renegade, like the Bitmaps, did things its own cool way: developers got a 50/50 deal, which Mike was adamant would work, telling The One that it would do for the software industry what Rhythm King had achieved for the record industry. Magic Pockets, which included music by Betty Boo, was published by Renegade in 1991, and designed by Sean Griffiths who had been friends with Dan from their days at Palace. "I had started bumping into Eric, Mike and Steve on nights out, and when the Bitmaps needed a new project, Dan said, 'Get Sean in'. One quick interview and they offered me a job," he says.

Sean was a huge fan of Xenon 2 – "a masterpiece which I played start to finish" – and he soaked up the office vibe. "Eric was quite an enigmatic character. Very designer clothing, chain smoking, smooth talking. Being based in a warehouse, it was a stylish place to work. There was a deliberate culture of being creative and different." ▶

TV Spotlight

How The Bitmap Brothers invaded your Saturday morning viewing

Young television viewers quickly became acquainted with The Bitmap Brothers' work when its debut game, *Xenon*, was picked up by a Saturday morning kids' television show called *Get Fresh*. Produced by Tyne Tees Television for the TV network, the programme was presented by Gareth 'Gaz Top' Jones, Charlotte Hindle and a puppet called Gilbert The Alien, and it asked viewers to call in and issue instructions down the line as the game played on their television screens.

Given the edgy teen vibe that was emphasised *Get Fresh* – particularly in comparison to the BBC's more wholesome *Saturday Superstore* and *Going Live* – it proved a hugely successful move. *Xenon* became the first Amiga game to enter the all-formats Top 40 and viewers at the time were struck by the defining standard-setting graphics.

"It was important that our games were top quality otherwise it would otherwise undermine the brand we were trying to build through self-promotion," Mike Montgomery says. In 1991 *Magic Pockets* had a similar starring role – this time on *Motormouth*, another Saturday morning television show that ran from 1988 and 1992, initially presented by the likes of Nell Buchanan, Andrea Arnold, Caroline Hanson, Tony Gregory and Julian Ballantyne.

As with *Xenon*, people would call and shout 'walk', 'zap' or 'jump' in order to win prizes. "With Renegade we had a close relationship with TVS, based in Maidstone, Kent and it was a case of helping other people out – there was no money in it," remembers Mike. "I was interviewed on *Motormouth* live and it was the most frightening thing I have ever done in my life. No one else wanted to do it but I really enjoyed it in the end."

» PlayStation Speedball 2100 was a 3D rendition of Speedball 2 for the PlayStation but it didn't go down very well.

» Mega Drive Gods on the Mega Drive was much faster than the computer versions, but it arguably made the game more difficult.

Even so, there was a struggle of sorts. "Mike was always pushing for the deadline and Eric the quality," Sean says. "Eric won the argument generally until it started to become ridiculous with delays of years rather than months and weeks." Like Dan, Sean loved the freedom. "I was an absolute ideas machine and my creativity ran riot," he says.

Soon Renegade was also working with Sensible Software and Bullfrog Productions, two more developers with the Bitmap outlook. "I think the closeness with Sensible added to the allure of The Bitmap Brothers," says Jamie Barber who joined in 1997. "I remember being at E3 having a smoke outside a pub and a journalist couldn't believe he was smoking with 'The Bitmaps', Mike and [illegible] to him it was a really big thing."

It helped that the games were top-drawer. In 1993 The Chaos Engine was released, followed by The Chaos Engine 2 three years later. Working to a design by Eric Matthews and Simon Knight, Dan produced the graphics while Richard Joseph made the earliest use of interactive music, creating a title that was acclaimed. The game benefited from a title theme composed by the British alternative dub/dance music DJ duo Joi.

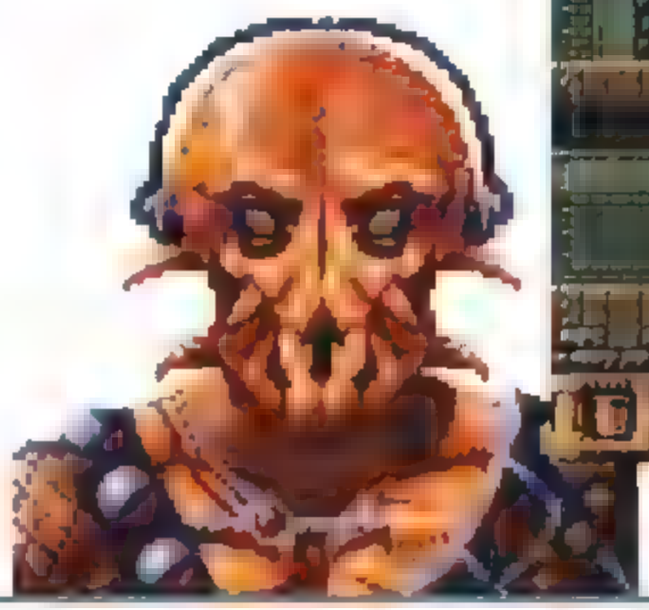
"Music enhanced the graphics and gameplay and there is nothing more powerful than sound to create mood," says Dan who recalls working with Phil Wilcox on the game. "He didn't stay for the full length of the project but that game fell out of our minds. He came up with this Victorian thing and we just followed our noses."

Socialising remained crucial. Dan and Eric would go to the South Bank and skate together and the sessions in the pubs and nightclub bonded the team. Yet although Dan produced additional artwork for Z in 1996, he left soon after, saying he yearned for the same creative freedom he'd had earlier. But this was a hard time for the developer.

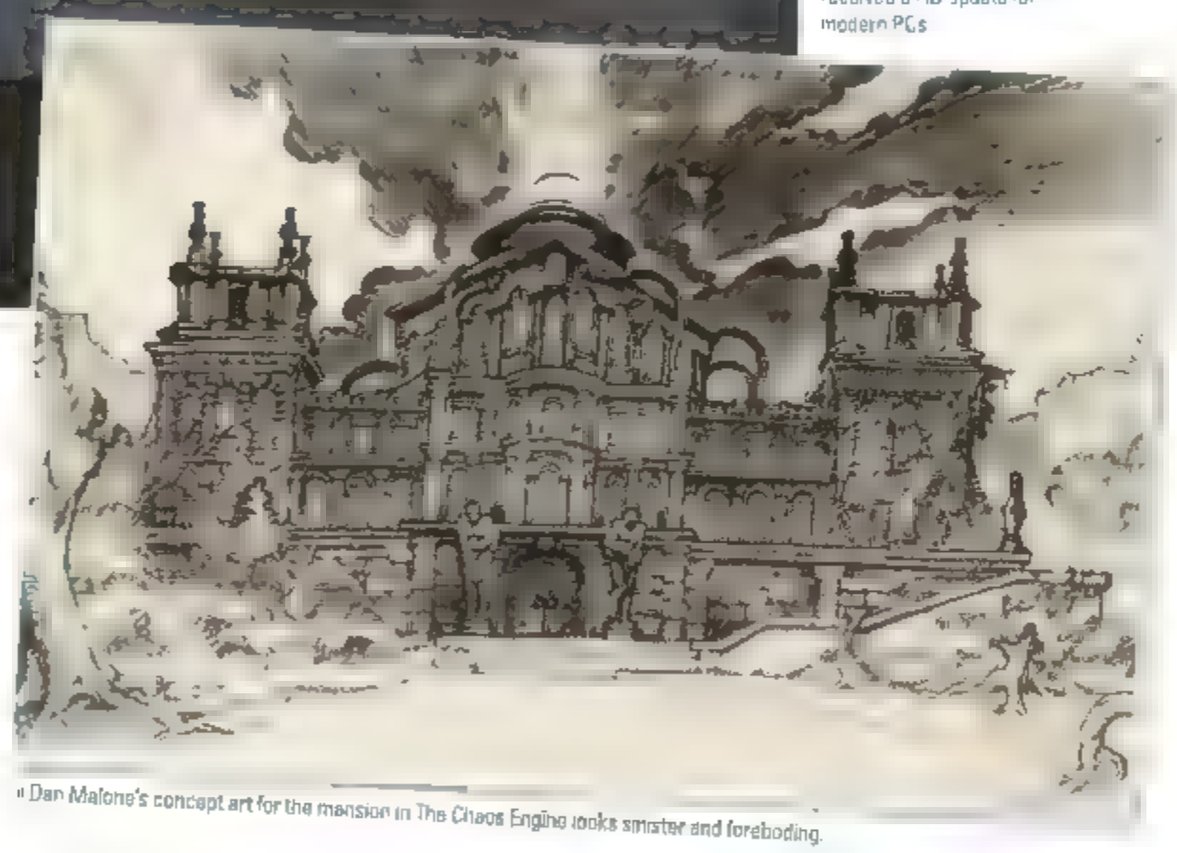
Indeed, such was The Bitmap Brothers' troubles, that PC Zone was even asking, "Whatever happened to them?" in 2000. The death of the Amiga and the move away from 16-bit games had taken effect although the studio had stuck to its guns and remained independent. "There are a lot of suits around now," Mike told the publication. "A lot of companies are being run by accountants instead of creative people."

Still, The Bitmap Brothers battled on. Ed Bartlett joined in 1999, working as a tester on Speedball 2100 before becoming a designer on Z: Steel Soldiers and coming up with the concept and level design of Xenon 2000: Project PCF. He was a big fan of the Bitmaps. "It's no exaggeration to say that they were my heroes growing up," he tells us.

"Working at The Bitmap Brothers felt like being part of a family rather than a business," he says. "Many of the original team and collaborators were still active when I joined but there was a lot of talented new blood arriving, keen to forge ahead and write new chapters." Among



PC Speedball 2's popularity ensured that it received a HD update for modern PCs



Dan Malone's concept art for the mansion in The Chaos Engine looks sinister and foreboding.

"There was a lot of talented new blood arriving, keen to forge ahead and write new chapters"

Ed Bartlett

those was Anthony Bowler who became a programmer for the Bitmaps in 2001

"I recall it being quite old school and the team spirit was definitely there," he says. "The Bitmaps had a fantastic reputation for making incredible games and I was really excited to be involved in whatever their next project would be."

Anthony worked on Speedball Arena, a follow-up to the flop 3D title Speedball 2100. Ed says he had a vision of reviving Speedball as an esport and he struck a deal with Epic that allowed the Bitmaps to make use of the Unreal Engine ("they were desperate for it to break out from being a simple FPS engine," he says). Bowler tells us Speedball Arena had got to a playable prototype stage with players, animations, early AI, replays, big TV screens and basic sounds/music but it was canned.

Even so, the magic was still there and anyone who worked for the Bitmaps could sense the cool vibe until it drew its last breath. "I began my career at the Bitmap's offices in Metropolitan Wharf so I really didn't have a frame of reference for what it was like until I was relocated to Eon's Soho office, soon after Z: Steel Soldiers was finished," says Jamie Whitworth, who was taken on as a junior level designer in 2001.

"It definitely had a personality of its own that I haven't seen since and you could split the staff into two groups, the first being those that had been developing games since the Eighties and early Nineties, and the next generation of developers who had only been in the industry for a few years."

Jamie worked on World War I: Frontline Command which proved to be The Bitmap Brothers' last major release. It had been created in collaboration with Codemasters but it hit an impasse at a fairly late stage so Ed, who was by now business development manager, attended a meeting with the Codemasters' finance director and handed over three scenarios written on scrap paper and told him to choose one.

"Only one showed a positive outcome for both parties which was continuing with development as planned," he says. "Unfortunately, the relationship had broken down to a point where that was not deemed possible regardless of the economics but we were eventually able to negotiate a position where we could finish development and place it with the then-fledgling Deep Silver."

To help make ends meet while it sought a deal for the development of a new title, the Bitmaps also ended up porting three Namco games, Kill Switch, Dead To Rights and Pac-Man World 2, to PC, a lifeline that had been thrown by Boxall when he worked at Hip.

Eventually, the good days ended but there have been some releases in recent times, including a mobile version of Z in 2011, Speedball 2: Evolution in 2012 for Android, The Chaos Engine in 2013 for PC, Linux and Mac and Gods Remastered for the Xbox One in 2018. What's more, Mike is still recognised today just like he was back then.

"Oh it would be ridiculous at times," he says of the past. "We never gave out our address but people tracked us down and came for autographs and all sorts of things. But the thing is, I've done a lot of consultancy and contract programming in recent years and when I go to a new company, I'm amazed at the number of people who say, 'you're from The Bitmap Brothers!' It's the same when I go to a retro show. People are all over you sometimes." We sense he wouldn't have it any other way. ★

PC, World War I: Frontline Command showed The Bitmap Brothers could turn its hand to real-time strategy.

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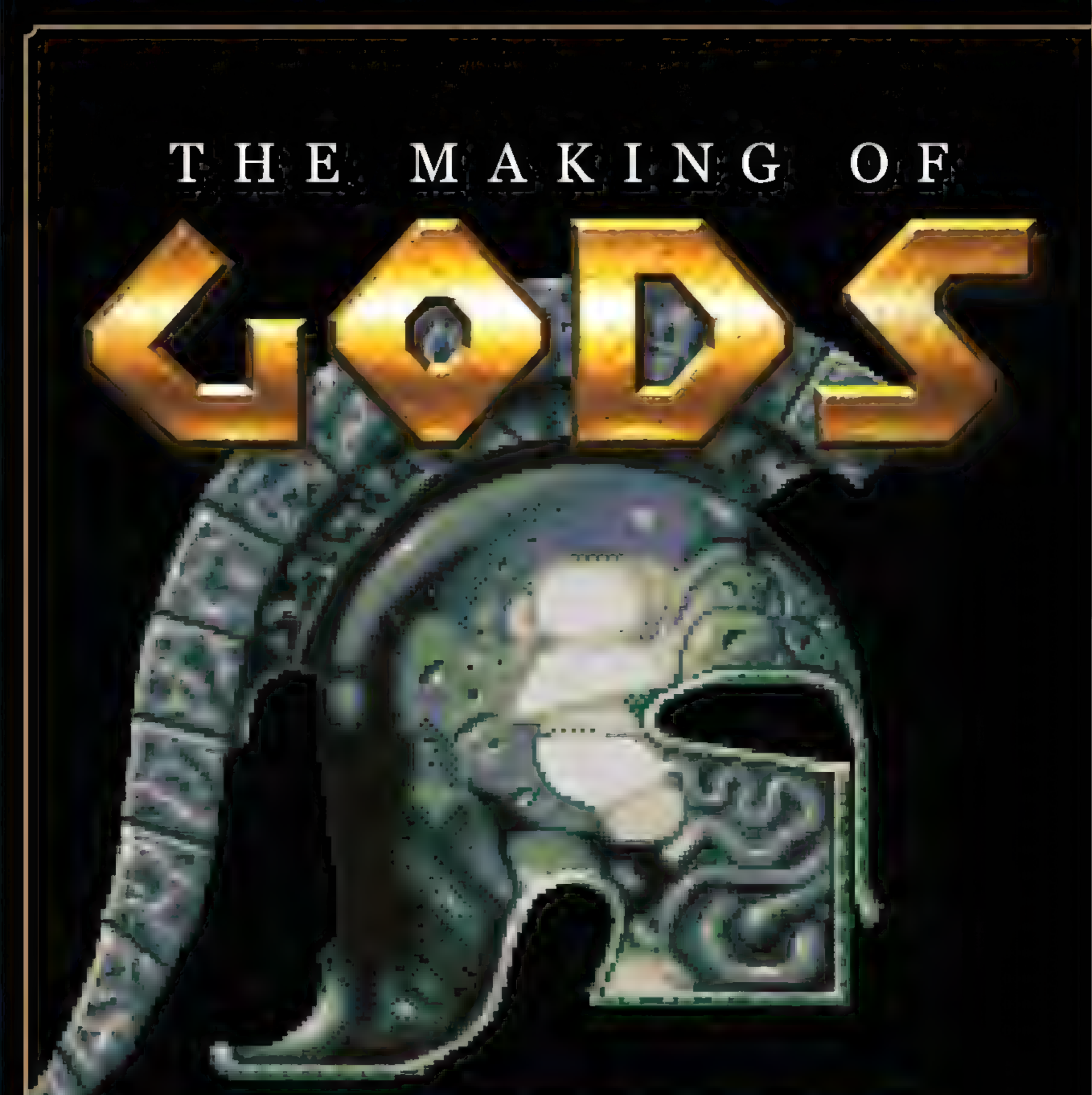
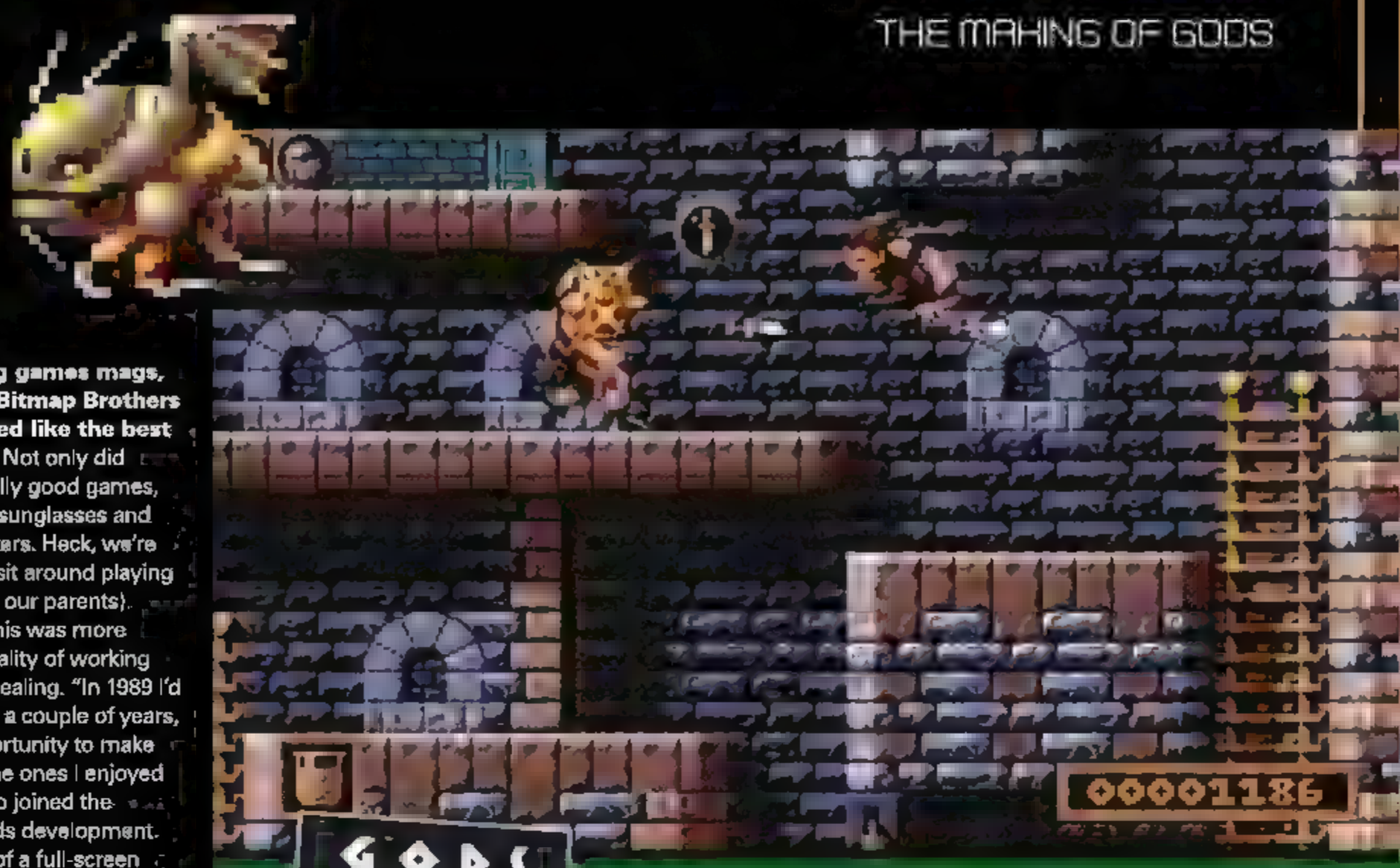
THE MAKING OF

GODS



Players take on a challenge from the gods in the Bitmap Brothers' platform adventure, and while the task of coding it might not have been a Herculean one, it still required plenty of work. Steve Tall tells us how it was done

Words by Nick Thorpe



To any kid reading games mags, working for the Bitmap Brothers must have seemed like the best job in the world. Not only did you get to make games – really good games, actually – but you wore cool sunglasses and got to ride around in helicopters. Heck, we're a bit jealous, and we get to "sit around playing games all day" (according to our parents).

Of course, we know that this was more image than reality, but the reality of working for the studio was pretty appealing. "In 1989 I'd been working at Tynesoft for a couple of years, but I was looking for an opportunity to make games that were more like the ones I enjoyed playing," says Steve Tall, who joined the team in the early days of Gods development. "I put together a tech demo of a full-screen side-scrolling shoot-'em-up on the Atari ST. Full-screen scrolling on the ST was a challenge as it lacked the hardware scrolling capability of the Amiga. The gameplay in the demo was simple... but I used a technique where I rendered the player's ship every frame during the vertical blank. Even though the main game was running in three or four frames, the player's ship being rendered every frame made it feel extremely responsive. I sent the demo off to the Bitmaps and got a call to come down to London for an interview."

Without knowing it, Steve had created the perfect way to pitch himself. "It turned out that they were looking for a programmer to work on their new game concept which was a platform game that needed full-screen scrolling, and luckily my demo convinced them that I could do the job," he recalls. The concept for Gods had already been fleshed out a little by the time Steve got to work. "There was already an outline design document and some early art at the time I visited the office for my interview, but I believe it was Eric [Matthews]' concept. I thought it had the potential to be special as soon as I saw the first sprite art from Mark [Coleman]." With his new job secured, Steve went back to the northeast to begin work.

IN THE KNOW

- **PUBLISHER:** RENEGADE SOFTWARE
- **DEVELOPER:** THE BITMAP BROTHERS
- **RELEASED:** 1991
- **PLATFORM:** ATARI ST, VARIOUS
- **GENRE:** PLATFORM/ADVENTURE

» [Amiga] Flying enemies are a real pain, as they're completely unhindered by the level's terrain.

In Gods, players would take control of Hercules in a platform hack-and-slash, battling through challenges set by the gods in order to achieve immortality. Journalists of the time often compared it to Capcom's Black Tiger, which featured a similar hero, but Steve can't confirm any influence. "I've never played Black Tiger, but I can definitely see why people might make the comparison. Given the timeline it seems possible that it had some influence on Eric or Mark but I don't remember it ever coming up in conversation."

Steve's first job was to create an editor tool, which would aid the process of designing the stages. "It was the first game editor or significant tool of any kind that I'd created and I remember being sceptical at the time about whether it was really needed. It absolutely made sense though, especially given that I was working almost 300 miles from the office. It allowed Eric to work independently on the game design and balance without being reliant on having a programmer next to him." The editor was a powerful tool, too, allowing you to do just about everything you could want to do with a stage. "It had a visual level editor, with an undo feature. It also allowed the user to place platforms, doors, trapdoors, levers and switches, and enemy spawners. You could edit the attributes of weapons and enemies, and there was an enemy wave designer." As well as the visual editor, there was a multicondition puzzle editor.

Steve and Eric split the level creation duties, as the task was particularly time-consuming. "There was a lot of experimentation and iteration, and we would play through each other's work-in-progress and give feedback and suggestions." As it transpired, the ▶

» [Amiga] Hercules can add considerable firepower to his arsenal, including fireballs and magic hammers.

BOSS RUSH

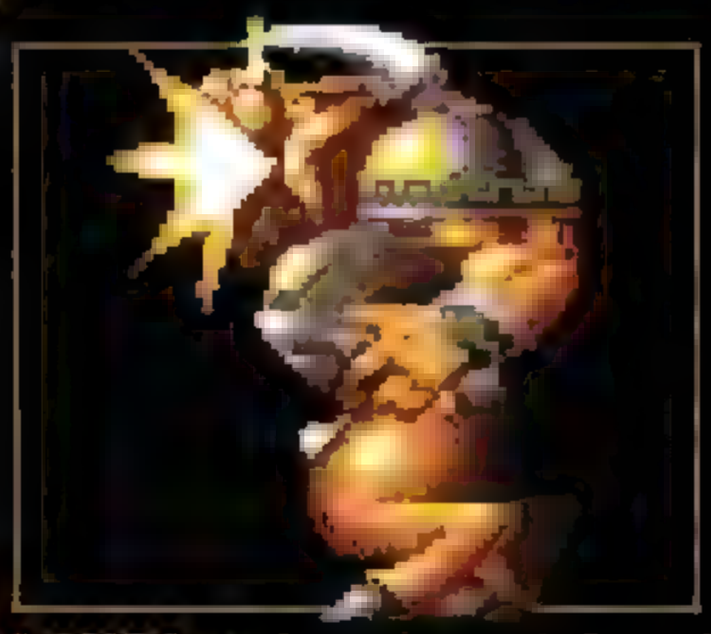
The four great beasts that Hercules must slay

LEVEL 1

■ This giant walks back and forth slowly, throwing fireballs that bounce in a high arc. Since they actually bounce so high that they can clear Hercules entirely, you just need to walk back and forth to the safe spots and keep laying on the damage until the giant is finally slain for good.

LEVEL 2

■ While this dragon looks pretty scary, it isn't actually as tough as you might think. It mostly just hovers on the right side of the room. Dig you feet in on the left side and you'll avoid its fiery breath completely, then just duck the shots it occasionally makes from its tail and keep firing.



LEVEL 3

■ Here we have a Minotaur, and it's a bit trickier than the other bosses. It'll constantly advance towards you while shooting from the mouth – try to stay at least half a screen away at all times. When it jumps, it'll cause tremors. Go underneath it if you can't otherwise escape.

two designers also approach their stages with different philosophies. "Eric preferred to plan out as much of the level as possible ahead of time and think in terms of the flow and story of the level before laying it out in the editor. For my levels, I'd just jump into the editor and start playing around," Steve recalls. "Generally, Eric created levels one and three while I did two and four. You can tell which are which because Eric planned ahead and always liked to start the player on the left, which makes sense since it generally feels better to play from left to right."

Much of the prerelease hype for Gods centred on the intelligence of the enemies – their behaviour was slated to change based on what you were doing. "I'd say that there was desire to get more

> "I would just jump into the editor and start playing around with layouts and trying different combinations"
>
> Steve Tall

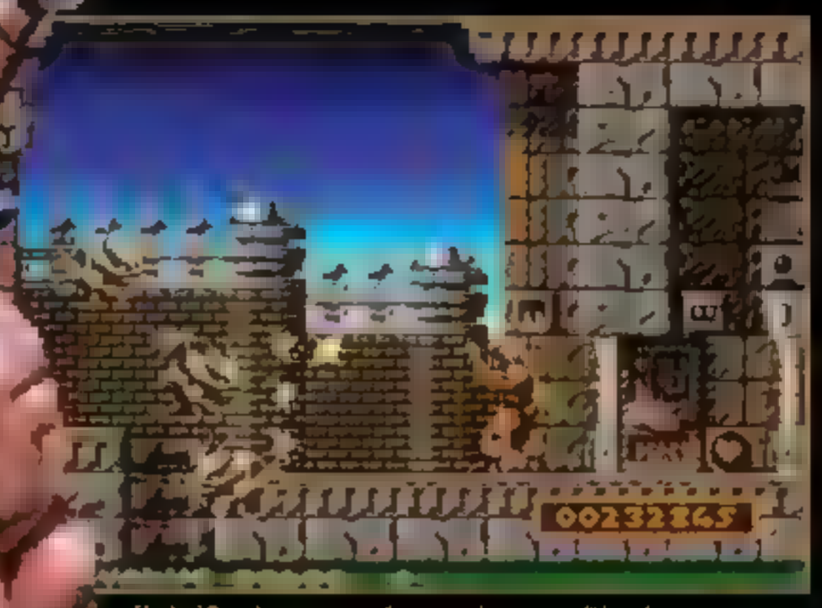
variety in the gameplay puzzles, and make the world feel more interactive and less predictable," replies Steve. However, in reality the illusion of intelligent behaviour was created using conditions that the game was already tracking for puzzles. "Eric and I would talk through ideas for different puzzles and gameplay setpieces and I think the thief came out of one of those discussions. Sometimes I would extend the editor functionality to be able to set up the situations we wanted, but we were also brainstorming how to create interesting puzzles from the editor controls we already had in place. The moments where the enemies do unexpected things like stealing a key were all prescripted in the editor and based on triggers for things like position, health or what the player had in their inventory."

One area where there was less freedom was with the bosses, as they had to be designed around the finished art assets. "I'm sure that Eric and Mark had some conversations about what the bosses should look like before the art was created, but my input started after the art was finished," Steve tells us. "I would get a new sheet of sprites with a boss and it was up to me to work out how the pieces fit together and then to come up with a design for how it should move and attack in the game."

Speaking of balance, another major feature that was touted in the press was Gods' dynamic difficulty. Steve reveals that this was another task achieved using the versatile editor. "We would pick certain points in the map progression and use the player's inventory, health and remaining lives as triggers," he explains. "In the right circumstances, we might provide an extra life or drop a weapon that we thought the player would find helpful."

Despite not being in the office directly, Steve recalls the development work on Gods going pretty smoothly. "I did almost all of my work from my home in the northeast," he recalls, "I would usually only make day trips or overnight trips to London maybe once a month or so, and then Eric or Mike would come up to visit me at other times. In between, we would have long discussions over the phone and I'd use a modem to deliver code and download assets."

Inevitably, this couldn't last as the game's deadline approached. "Towards the end, I made more trips to London, culminating in a trip that was supposed to be two days but turned into two weeks without leaving the office. I'd sleep on the floor at night and work during the day. Apparently, the smell was getting pretty bad so after about ten days



» [Amiga] Enemies can spawn from anywhere, so you'll be wise to constantly look for threats.

LEVEL 4

■ You'll want to be on the left side of the top platform for this skull. Your target is the snake thing that emerges from it – duck when it first shows up, then turn right and fire until it perishes. Since this is the last barrier between Hercules and victory, you'll need to destroy a few of them.

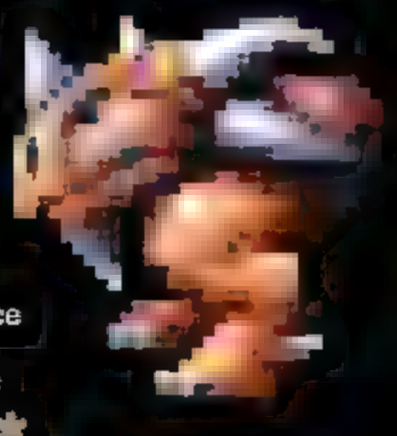
» [Amiga] There are plenty of treasures atop those trap doors – but do you walk on them?

Mike took me over to his sister's home so I could have a bath. That was some old-school crunch."

Gods was able to live up to the potential it showed, earning acclaim from the likes of CVG, The One, CU Amiga and Amiga Power upon its release in 1991. Only Amiga User International's 79% review stood as an outlier. Decades later, people still fondly remember Gods. What is it, in Steve's opinion, that helps the game to remain popular? "That's a difficult one for me to be objective about," the coder replies frankly. "Gameplay-wise the puzzles provided a lot of replayability since it was hard to solve everything on any single playthrough and, even with the adaptive difficulty, it wasn't an easy game to finish.

"Mark's art was just beautiful and his style was so recognisable and synonymous with The Bitmap Brothers, and the music worked so well too," he continues. "The Bitmaps just had a dedication to quality, and I think people could see that and appreciated it. A few times over the years I've had people tell me that it's their favourite game and hearing something like that is incredibly gratifying, and humbling at the same time."

Gods never received a sequel, and later ports to other platforms failed to materialise – most famously Crawfish Interactive's Game Boy Advance version, left unfinished due to the developer's collapse. However, Hercules would return – even if it did take a couple of decades to make it happen. ★

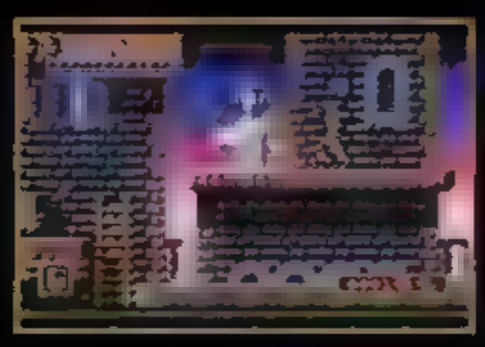


CONVERSION CAPERS

When faced with many Gods, which do you worship? Find out the differences here...

ATARI ST

■ As the lead version of the game during development, the Atari ST version of *Gods* is naturally rock-solid. The game plays very well and the title music sounds just as good as you'd hope. Unlike many of the subsequent versions, your inventory only pops up on screen when accessed.



AMIGA

■ As you might expect, this is a little nicer than the ST version – but really only a little. The intro music sounds a touch better and the background gradients benefit from the Amiga's greater ability to handle colour, but that's about your lot. Nobody minded, though – it's just as good.

ACORN ARCHIMEDES

■ This port by Krisalis is an odd half-way point between the computer versions. The ST/Amiga HUD is used and there's no background music in stages, but like the PC/PC-98 versions the background colour gradients have been removed.

PC

■ This is the first version to use a fixed status bar, and you get to see somewhat less of the level around you as a result. If a Roland MT-32 sound card is present, you'll be able to play with background music – your mileage may vary on whether this improves the experience.

NEC PC-98

■ This Japanese computer version published by PCM Complete is completely in English, so don't worry about being able to read it. It's based on the PC version and includes the background music and simplified backgrounds as a result. Speed and performance depends on your CPU.

MEGA DRIVE

■ The Mega Drive version includes background music and adds new intro and ending sequences, plus recoloured graphics, new backgrounds and slightly revamped controls. The game is much faster than on the computers, and the difficulty jumps up as a result.

SNES

■ On Nintendo's console, *Gods* retains all of the features of the Mega Drive version. The music benefits from the excellent sound hardware of the SNES, but the console's lower resolution results in a reduced horizontal field of view, which makes things slightly trickier.

REMASTERING GODS

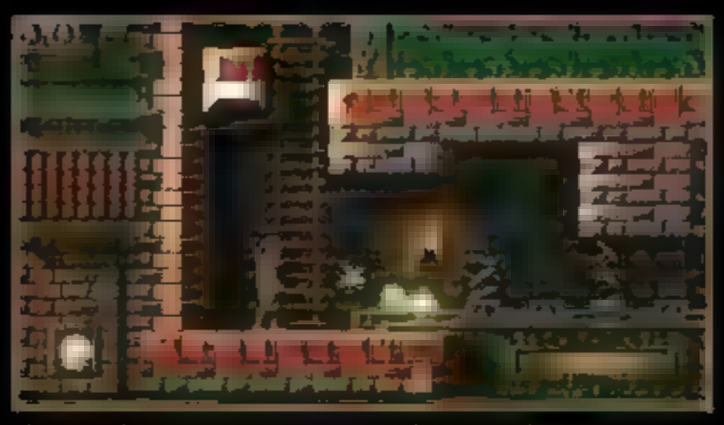
Despite being an extremely popular part of the Bitmap Brothers tapestry, Gods has never been revisited. That's all changed thanks to a brand-new remaster. Nils Hammerich explains how it happened

Words by Nick Thorpe

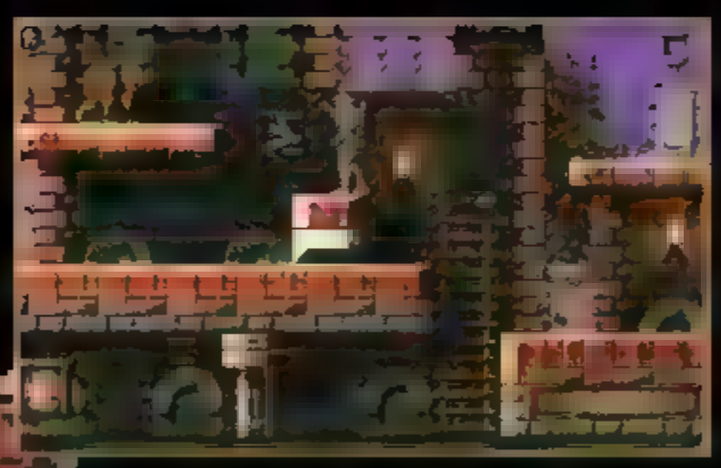
With so many memorable games in The Bitmap Brothers' back catalogue its not surprising that titles like The Chaos Engine and Speedball 2: Brutal Deluxe have had high-definition updates in recent years. Gods Remastered is the latest game from the acclaimed developer to receive a similar interest from a modern developer, and like those earlier games, it has been completely overhauled for a new generation of gamers. The Gods you would have enjoyed back in the day is suitably enhanced, and it's currently available for PC and Xbox One, with PS4 and Switch versions on the way and even a mobile version planned. What you might not know, however, is that Nils Hammerich, CEO of Gods Remastered developer Robot Riot, also tried to get a revival off the ground several years ago and he came tantalisingly close to making it happen.

"I used to own a company that was focused on mobile games, years before the iPhone came out when the Java phones were around. No one took this whole mobile gaming thing seriously, so there were a lot of opportunities to get these famous brands back then," he explains. "At one trade show we had the opportunity to licence games from The Bitmap Brothers, and among them was Gods. For me personally, I played the game a lot on my Atari ST back in the day, so it was an obvious choice to go after this one." However, the project ultimately never came to pass. "We secured that licence and worked for quite some time on the Java version of the game, but it never got released – the company was sold and basically, the licence got lost," Nils says.

Thankfully, that failed endeavour would be the seed of what ultimately became Gods Remastered and it allowed Nils to revisit one of his favourite Atari ST games. "The project never really left my mind, so a couple of years ago I tried to dig it up and pursue it again, and contacted the company that owned all the assets of our original company, and finally managed to get this licence," Nils explains. "I started work on a mobile version on iOS and Android, and when this was almost done I contacted Mike Montgomery and asked him what he'd say about releasing the game on other platforms as well, as the original licence only covered mobile. He liked the idea and as the game was far in development, he was able to take a look and he liked what he saw, so we agreed to push it on all other platforms as well."

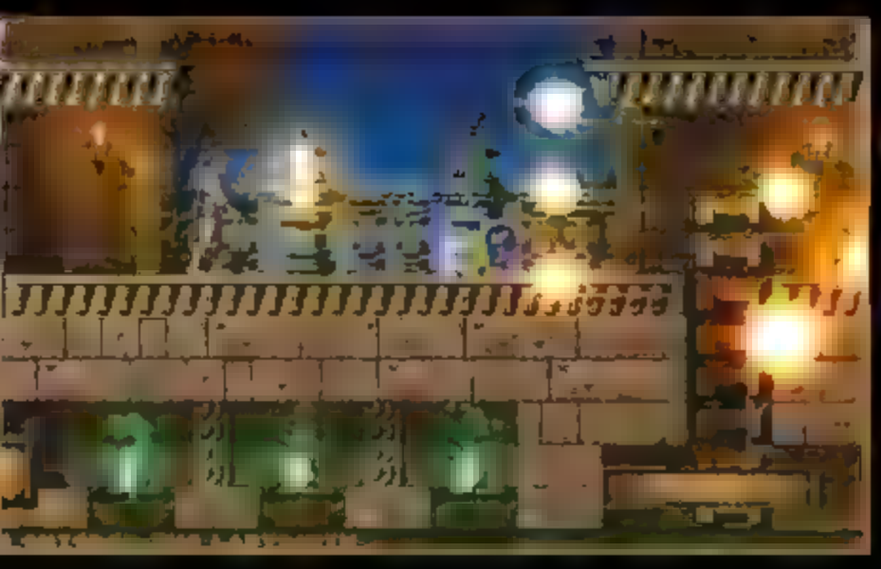


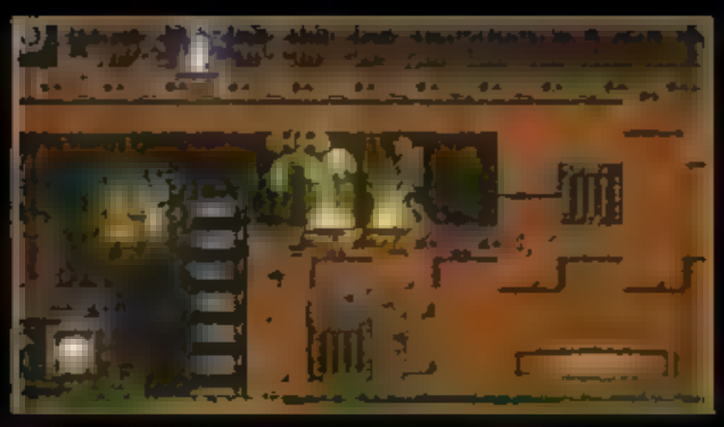
» [PC] Hercules has a variety of weapons to help him deal with the trials that lay ahead.



Development on Gods Remastered has gone rather smoothly as Nils had access to a great deal of original development material. "The original licence covered all the source code for Amiga and PC, as well as the original graphics assets, so there was not much work on my end to acquire the original assets. It was actually fun to learn the Motorola assembler, since I stopped working with

» [PC] Although it features a brand-new engine, Robot Riot's update remains faithful to the 16-bit original.





» [PC] Dynamic difficulty returns in Gods Remastered, giving the Help Bonus seen here.

assembler on my C64!" We had to ask if there were any surprises in the code, but the main thing Nils found was good programming practice. "What surprised me the most was how well it was documented – it was quite good to read and the implementation was pretty straightforward. I think they were very professional guys at work."

Gods Remastered runs at a silky smooth 60 frames per second, but with the original pacing retained from the home computer versions. The major change is that there is a brand-new presentation layer with 3D models, shadows and lighting, and you can switch between this and the original graphics at any time, a neat trick that's also featured in remasters like The Secret Of Monkey Island and The Dragon's Trap. "Everything is rendered in parallel, you just switch it on or off," says Nils. This was arguably the trickiest area of the remaster to achieve. "Obviously there are a couple of restrictions when you look at how the remastered version lets you switch between the two modes at any time in the game, at the same time, we wanted to keep all of the original gameplay intact. So for animation, particularly transitions between animations and things like that, this was a bit limiting because everything needs to happen instantly so like the games worked back then, but nowadays we'd flesh out these transitions much more than we were able to do in the end."

» [PC] The old starburst effect was impressive for the time, but the new effect is obviously way ahead of it.

"The project never really left my mind, so a couple of years ago I tried to dig it up and pursue it again"

Nils Hammerich

In order to ensure that the game meets expectations, Nils has been working with Mike Montgomery. "He playtested it quite a bit and had some good suggestions, for example to modernise the controls." But things are by and large the same, with the level designs, puzzle and enemy layouts all carried over intact to the remaster. There's only one major exception: "The only thing that was a bit sad was that we weren't allowed to use the original title music," says Nils. "Everyone remembers it so it would have been nice to use it. We even contacted the music publisher, but they didn't show any interest in pursuing this opportunity. That's the only change to the original version."

Nils may not have been able to source that original intro music, but his team has still been able to create a game that not only pays tribute to the original, but also freshens up Hercules' classic adventure for those who never got around to experience it on the 16-bit systems of the time. It would appear that even after 28 long years, Gods still has plenty of appeal.

So Gods, much like its own hero, has braved some tough times but was ultimately able to achieve immortality – or something as close as possible in the world of videogames, at least. If you've not played it for a while, give it a try and see if you're up to its considerable challenge. ★

» [PC] There are plenty of items to buy in the shop, providing you have the cash.

Defender

» DEVELOPER. Williams Electronics » YEAR. 1981

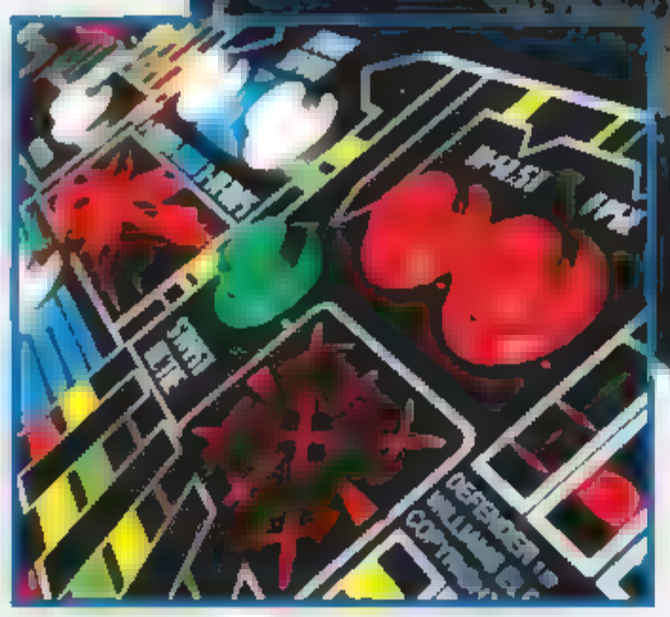
Daunting is perhaps the best word to sum up your first impression of Eugene Jarvis' scintillating shoot-'em-up. When Defender was first released in 1981 many arcade games of the time either relied on a single joystick or a couple of fire buttons, which made Williams' game quite intimidating. Indeed, it seems quite mad to have so many buttons but there's method to the madness, and the elaborate configuration comes from Eugene wanting to emulate the control systems of two popular coin-ops, Space Invaders and Asteroids. As a result, the left side of the cabinet features a two-way joystick to control up and down movement and a nearby reverse button, while the right side of the cabinet has smart bomb, thrust and fire buttons. Lastly, the Hyperspace button is positioned right in the middle of the setup, allowing you a last ditch attempt to try and save your ship if your reflexes are fast enough. It's all finished off with eye-catching panels to no doubt represent the insides of your spacecraft and some spectacular artwork on its side panels. There's a cocktail alternative, as was traditional for the time, but it's the upright version that we first encountered and continues to leave the biggest impression.

Defender Fact

■ Cocreator, Eugene Jarvis used to work on pinball games for Williams Electronics before he began work on *Defender* with Larry DeMar. It was the company's first attempt at making a videogame.

STANDOUT MOMENT
Adventures in hyperspace

There's a reason why Defender's hyperspace button is so far away from the rest of the controls – it's a button that isn't supposed to be used unless it's absolutely necessary. As with Asteroids, it's sparingly used because there's no guarantee that it will result in success. Still, when you're facing down hordes of enemies and escape seems absolutely futile, it's little wonder that so many of us end up reaching for that button. After all, there's nothing more exhilarating than using it to escape death and realising you've to fight another day. On the other hand, few things are more distressing than seeing your ship materialise inside an enemy craft. Ouch!



SYSTEM SUPPLIED BY ARCADE CLUB

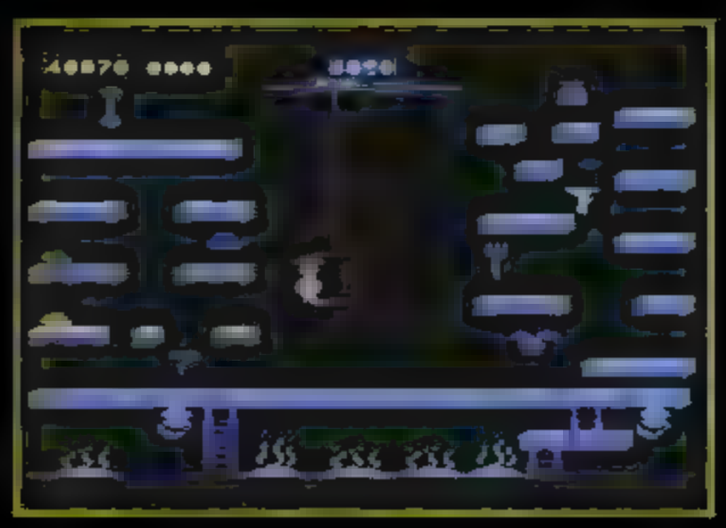
ULTIMATE GUIDE:

Bounty Bob Strikes Back!

It was a very long time coming but in 1984 Big Five Software finally delivered the long awaited sequel to the groundbreaking Miner 2049er. We take a look back at Bill Hogue's under rated sequel and explain why it's still worth playing today

Words by Kieren Hawken & Darran Jones

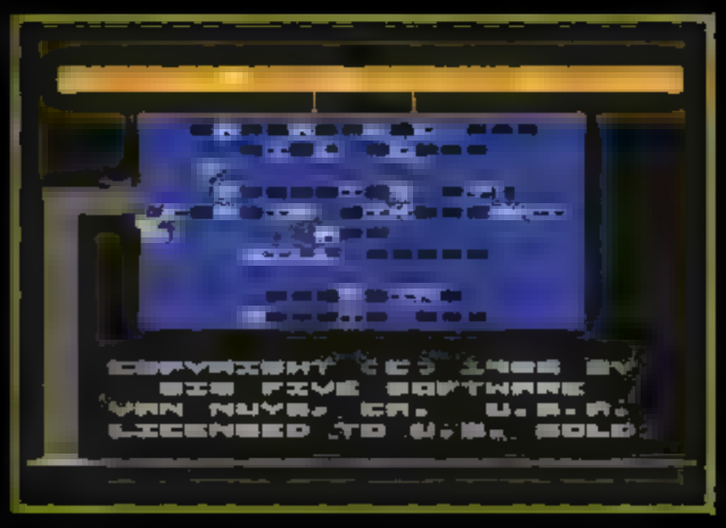
Up until 1982 Big Five Software had only ever produced games for the limited monochrome TRS-80 computer, but that all changed when company founder Bill Hogue decided that the time was right to upgrade. The TRS-80 was dying a quick death in the wake of more powerful colour computers such as the Commodore 64 and Atari 400/800. So, after much deliberation, Bill decided to choose the latter for his next hit. The first game he produced for his new-fangled Atari 800 was a platformer called Miner 2049er and it became an



[Atari 8-bit] Making use of the miner's lift is essential if you want to clear stage two.

overnight success. The very first real platform game had arrived just two years before in the form of Universal's Space Panic and the genre was expanded further by another even more successful arcade game: Nintendo's seminal Donkey Kong. What Miner 2049er added to the genre was the theme of collecting objects to complete each screen, something that became of staple of platform games from that day forward. Inspired by the California Gold Rush of 1849, in which the miners were nicknamed 49ers, Miner 2049er saw you take on the role of one Bounty Bob, who was trying to recover all the gold from ten different caverns. It received praise for featuring far more screens than Donkey Kong or any other similar platform game of that time and it went on to be converted to multiple home systems. It's also credited as being the inspiration for Matthew Smith's classic Manic Miner, a game that borrowed many of its core ideas.

So when you create a title that's voted game of year, shoots to the top of all the sales charts and spawns numerous clones it's always going to be hard to follow that up. Almost straight away Bill



» (Atari 8-bit) Jumping into the giant chutes will send you to a different part of the screen...

knew that he had to make a sequel, but creating it was much harder than you would probably imagine. Initially Bob was going to appear in Scraper Caper, which saw him transform from a miner into a fireman, long before we saw then rival Mario swap careers on a whim. The game was advertised heavily in the press of the time before disappearing in favour of Bounty Bob Strikes Back, which ended up being released two years after the original game. Rather than being very different to its predecessor Bounty Bob Strikes Back played it pretty safe and went with that old mantra, 'If it ain't broke don't fix it!' That's not to say that there weren't upgrades over Miner 2049er though, as there were – they were just far subtler than people expected. Firstly Big Five had upgraded the visuals, adding a kind of 3D effect to the platforms to add depth. Secondly the team had taken on feedback from the first game that some people found it too hard, so now when Bob lost a life he didn't have to start the level all over again and could just carry ▶

CONVERSION CAPERS

We unearth the many conversions of Bounty Bob Strikes Back

ATARI 8-BIT

■ The original version of the game and the best, as it features more colours on-screen than its ports and could also be played directly from a cartridge to save on loading. Most people also seem to prefer the sound effects from the Atari 8-bit original, too

ZX SPECTRUM

■ Ported for US Gold, this is an extremely impressive conversion of the classic platformer with absolutely tons of colour on screen, good sound effects, decent title music and fast, responsive control. The only real flaw is that it can get quite flickery

BBC MICRO

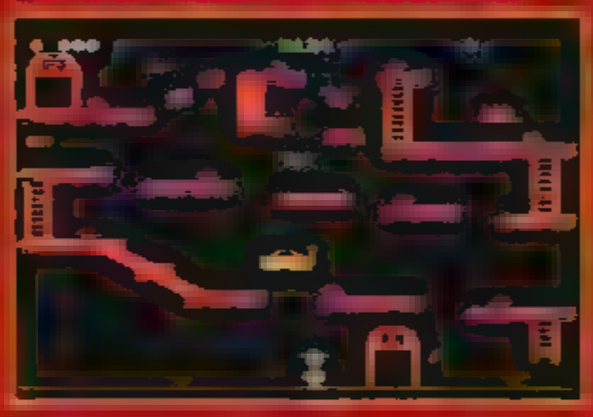
■ BBC stalwarts Micro Power handled this port for US Gold with Peter Johnson pulling coding duties. One big difference here is that it starts with a long explanation of the story. Once the game starts you'll notice the garish graphics and simple sound but it's still fun!

COMMODORE 64

■ The second version of the game to be developed and the only other one coded by Bill Hogue, this C64 port is very similar indeed to the Atari 8-bit original only with more muted colours and different sounding effects. It plays every bit as well, which is what really counts.

AMSTRAD CPC

■ Another US Gold-commissioned conversion, this one was handled by the little know Abersoft and they mostly did a good job. The graphics are lovely and colourful, it moves at a decent speed and has good sound effects. Our only minor complaint is the missing title music



ATARI 5200

■ The one and only console port of the game, this 5200 version is almost identical to the Atari 8-bit as you would expect given the virtually identical hardware. The only real change comes in the form of the control method, which is a little more fiddly and less precise

PC WINDOWS

■ Georg Rottensteiner liked the *Bounty Bob* games so much that in 2006 he created his own remake for the PC. This version, named *Bounty Bob Rides Again* also features all the levels from the original *Miner 2049er* as well as a brilliant level editor so you can create your own!

■ [Atari 8-bit] The only way to avoid falling down the slides is to jump over them.

▶ on from where he left off. Lastly, and perhaps most notably, the number of levels included had risen dramatically from the original ten to a pretty hefty (for the time, anyway) 25.

So let's dig down a little deeper into the game design of **Bounty Bob Strikes back**. In essence it's a single screen platformer where you must move around the screen collecting objects whilst treading down all the floors. It's that second part, which makes up one of the key gameplay features of both Bounty Bob games and sets them apart from their contemporaries. The only way to complete each level is by touching every part of the floor around the screen. When you start the level all platforms have a lined pattern on them, but as you walk across them this turns to a solid colour. A combination of jumping climbing and falling is required to access these platforms as well as utilising special features that are often unique to individual levels such as lifts, teleports, suction chutes and slides. You have two types of jump: long and short. Bob performs

■ [Atari 8-bit] This level is really going to test your pinpoint jumping skills to the max. Don't look down!

a long jump when you press the fire button as well as left or right, but if you press the button on its own and then press left or right he executes a much smaller leap. If you miss your jump or fall too far off a platform then you die instantly and lose a life. But this is not the only way you can meet your doom as there are enemies patrolling different parts of the screen. These can either be avoided (usually by jumping over them) or killed and it's this part that again makes Bounty Bob Strikes Back quite unique. In a clear nod to Pac-Man, collecting any of the on-screen objects causes the enemies to flash for a short period of time and whilst in this state Bob can simply touch them in order to kill them. The other thing we really should mention is that each level is timed and should you let the clock run down then you lose a life. Bounty Bob Strikes Back is definitely one of those titles where you have to learn each level very carefully and certainly isn't a game you're going to complete on your first attempt.

One thing we must mention about Bounty Bob Strikes Back (and one of the most impressive technical aspects in the original Atari 8-bit version) is the palette swapping. Not only does it change colours for each level but it also switches the entire palette round each time you die. This is a neat effect that adds a bit more variation to the game. We're also big fans of the sheer variety of elements that Bill threw into the game and while some of the levels are a little tougher to complete if you don't approach them in a certain way there's always something new to discover on the next stage. Bounty Bob Strikes Back wasn't converted to as many systems as its illustrious predecessor but it still received a fair few conversions of decent quality, with the most recent being a PC port in 2006. Bill's planned Bounty Bob trilogy might not have materialised, but it at least ends on a high.

BEAT BOUNTY BOB

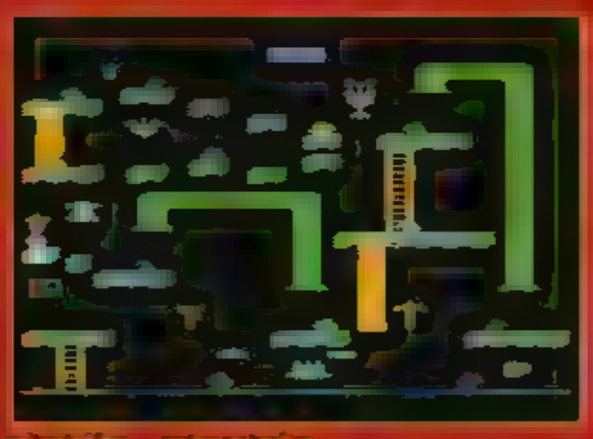
Use these hints to master the game

FORWARD PLANNING

■ Some levels can be a nightmare to complete if you don't cover certain platforms. Take a good look at each stage before you even attempt to navigate it. Slow and steady certainly wins the race in these cases.

DON'T MISS ITEMS

■ In addition to scoring you points, items are also useful as they allow you to kill the otherwise impervious enemies. They only grant you this buff for a short time though, so make sure you move quickly.



PIPE RIDER

■ Pipes are not only numbered but they also indicate which way Bob will travel once he enters them. This is crucially important because some platforms may be impossible to revisit once you've passed through a pipe.

LIFT ISSUES

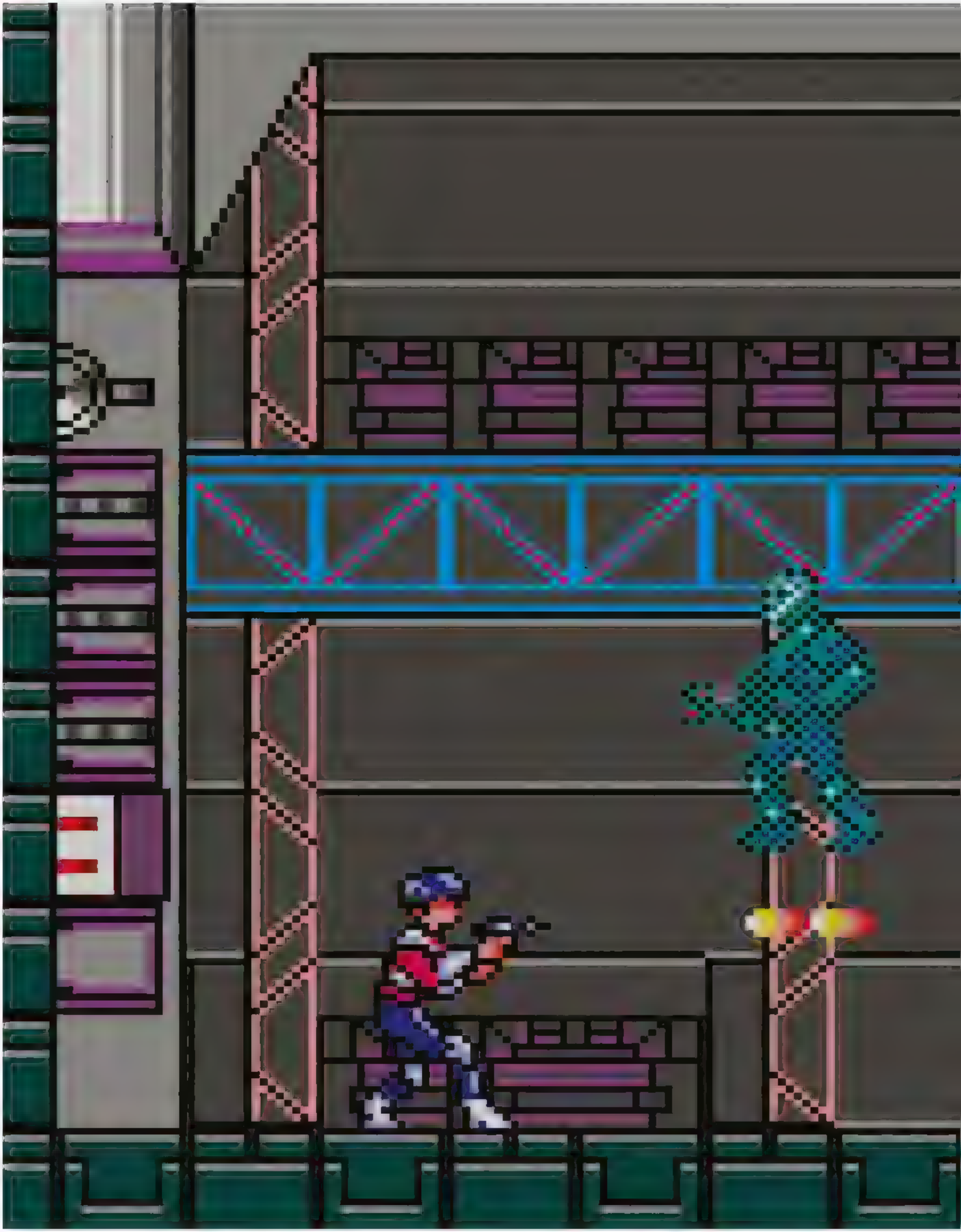
■ Be very careful when you use the lift. It's all too easy to jump out of it in such a way that it's impossible to get back to it. We always like to jump upwards first to make sure we have full control of Bob.

LOOK BEFORE YOU LEAP

■ Poor old Bob isn't the most athletic of fellows and as a result he can't fall very far without dying. Always make sure that you can survive a fall before you walk off the edge of a platform.

ELEVATOR ACTION

■ Be careful when entering elevators as some of the platforms they are on have patrolling monsters. You should ideally always pick up an item the first time you use them for maximum protection.



Zillion II: The Tri Formation

"KEEP ON ROLLING, YOU'RE A PURE STONE"

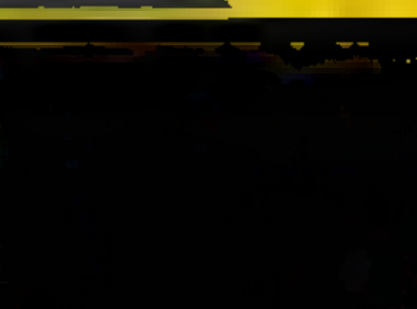
» MASTER SYSTEM » 1987 » SEGA

At one point growing up, it felt like the world was embracing my Sega habit. I could read Golden Axe and Wonder Boy stories in Sonic The Comic, and the titular star of that publication was turning up in cartoons on TV. As a result, it didn't seem so farfetched to imagine that other Master System games I loved would follow suit, even if I know the idea is pretty absurd now. But one of the games that I never imagined making the jump to television was Zillion II: The Tri-Formation, as I'd become tired of it pretty quickly. It was a fairly average action game which alternated between fast-paced motorbike scenes and run-and-gun segments, both of which were difficult and too bland to want to persist with.

Crucially, there were two big things that I did not know about Zillion at that time. Firstly, I had no idea that the original game was an action adventure closer to Impossible Mission and Metroid in style which was far better than the sequel. Secondly, and more importantly, I was completely unaware of the fact that Zillion was already a TV show – an animated series had run for 30 episodes and a straight to video special in Japan, and a few episodes had even been dubbed for the American home video market. However, the whole series was finally given an English release in 2018 so I've picked up the Blu-ray, and I've been listening to the gloriously Eighties theme music (a vocal version of the in-game music) all week in anticipation. My Master System obsession continues ★

ULTIMATE GUIDE:

BADL



When commenting on his post-apocalyptic novel The Stand, Stephen King said: "I got a chance to scrub the whole human race, and man, it was fun!" You get the feeling that Atari felt the same way when it created Badlands

Words by Martyn Carroll

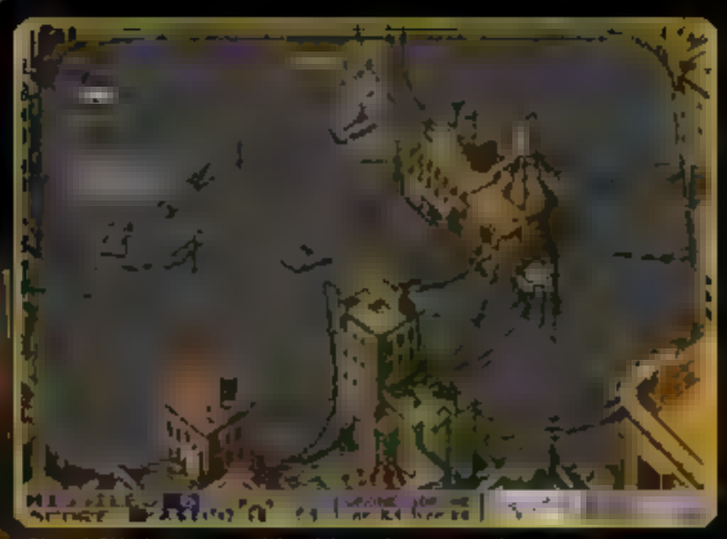
Sprint was a long-running series of top-down racing games, stretching back to 1976 and the release of Atari's original Sprint coin-op. Ten years later the series was rebooted with Super Sprint, which itself received a sequel/upgrade in the shape of Championship Sprint. Surely Atari couldn't justify taking another lap around this well-worn track?

With Badlands that's exactly what it did. Badlands was basically Super Sprint meets Mad Max, with the circuit racing taking place in a post-apocalyptic wasteland where armoured cars battled for the chequered flag. Weapons were the most noticeable addition to the formula. Rather than just bumping and shunting rivals you could slow them down by shooting them with your on-board cannon. Better still, you could acquire missiles which would remove them briefly from the race. It was an obvious thing to add but it did enliven the gameplay: blowing up a rival, preferably a human-controlled one, and racing past their smoking wreck to take the win was underhand but utterly satisfying.

Then there was the post-nuclear disaster setting that was no doubt inspired by films like Mad Max. Gone were the neat, grass-lined circuits from the previous games, replaced by tracks designed to look like they'd been carved out of the scorched earth. Crumbling infrastructure surrounded the tracks, and much of it was interactive. Shooting a trackside oil container, for example, would cause it to spill its contents all over the road, creating a skid hazard for your rivals. On other tracks you could shoot down fences to create handy shortcuts. There was certainly more to contend with than the tornado that bothered racers in the Sprint games. And as you couldn't select which of the eight tracks you started on, it was fun to progress through the game and discover the later courses and their specific characteristics.

Changes aside, this was clearly a continuation of the Sprint series. The super-responsive handling with its trademark understeer returned, as did elements like collecting wrenches to customise your car, and the chopper that whizzed in and replaced your smashed-up vehicle. One feature that didn't make a comeback was three-player racing. Super Sprint famously had a trio of steering wheels bolted to its large cab. Championship Sprint meanwhile was made available in a space-saving two-wheel configuration, and it's this compact form that Badlands followed.

The base hardware was also changed. Badlands ran on generic 68000 hardware rather than Atari's System 2 platform. As a result, Badlands ran at a lower resolution than the two previous Sprint games (336x240 rather than 512x384) and used a standard resolution monitor. This drop



[Arcade] Having completed the eight tracks, you were invited to race them again in reverse, and with additional hazards.

...AND S

[Arcade] Some tracks had some rather unexpected racing feat

in resolution resulted in 'tighter' tracks, and the total number of cars was dropped from four to three to make the racing more manageable. The standard set-up allowed Atari to offer the game as a JAMMA kit, complete with steering wheel and foot pedal assemblies, for $1,295. Dedicated cabs were also available for $2,295.

While Atari was downscaling, one of its coin-op competitors had already upped the stakes. Leland Corporation's Super Off Road was a familiar sight in arcades by the time Badlands arrived at the beginning of 1990. Its impressive upright cab offered support for up to three players and the game itself gave the formula a much needed shot in the arm. Gone were the slick circuits from Atari's games, replaced by rough tracks with multiple bumps and jumps. 'Super Sprint with dirt' was more fun that 'Super Sprint with guns', so Badlands struggled to gain traction.

Journalist Robin Hogg acknowledged this when he playtested the coin-op for Zzap!64 magazine. "Badlands is nicely presented with pleasantly simple gameplay but offers little new other than token extra weapons", he wrote, before delivering the killer blow. "Give me Super Off Road any day."

The reviews were quite mixed overall. It received 55% in Commodore User, 70% in Sinclair User, and 82% in C&VG, where Jaz Rignall

DEVELOPER Q&A

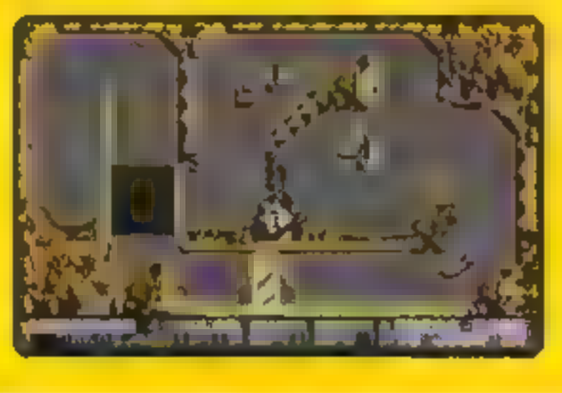
Steve Collins converted Badlands to the Commodore 64 while working for Teque London

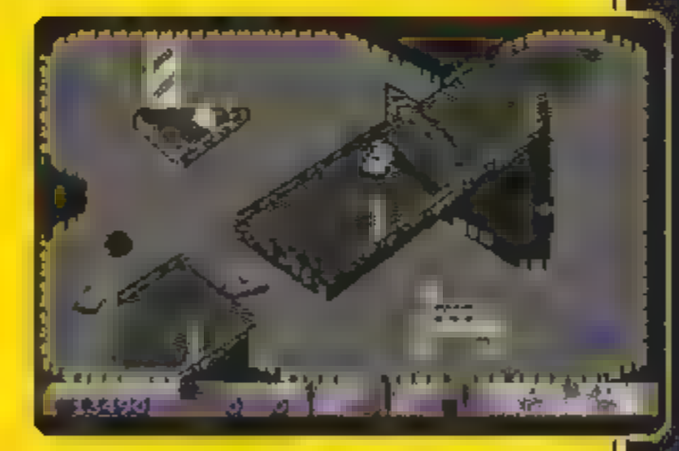
Did you receive any guidance or assistance from Atari when you started *Badlands*?

We didn't get anything directly from Atari, but we had access to one of the coin-op machines and we were able to reverse-engineer some of the graphics out of it by wiring into the ROMs on the main board and pulling out the raw data. By manipulating it we could determine data stride rates, grab bitmaps and colourmaps and so on. These were then retargeted to the various platforms using some code that we had developed at Teque.

Having access to the coin-op must have helped a great deal. A lot of the conversion teams we speak to had to rely on a videotape of the game being played through.

It did. One of the guys on the team – Jim, who left before the end – could play it pretty well and would play to various points to allow us to take over and figure out gameplay at different





parts of the game. The machine we had was not on freeplay, by the way. We had to rip out the coin slot so we could use the same coin over and over.

Was the guy who left Jim McLeod, who was credited with the Spectrum and Amstrad versions? Can you recall when he left?

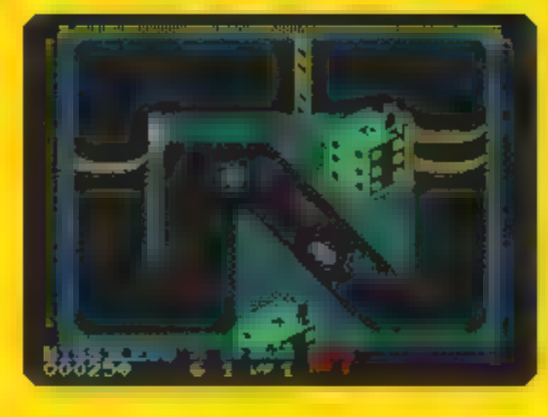
I'm not 100 per cent clear on his reasons for leaving. I'm sure you know that the main guy behind the ST/Amiga ports was Barry Costas – I'm not sure where he is now. The Teque team was run by Dean Lester who went on to head up the DirectX team at Microsoft.

Thank you for sharing your memories with us Steve.

I laughed out loud when I saw your initial email, but happy to help. I love Retro Gamer!

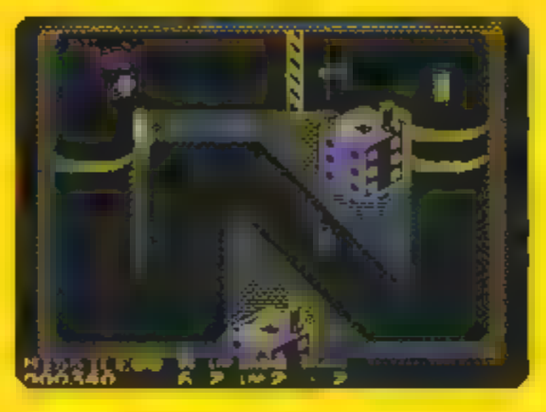
CONVERSION CAPERS

Putting the home computer adaptations through their paces



ZX SPECTRUM

■ The circuit layouts are the same as the coin-op but a lot of the scenery is different or missing (and there are no interactive elements). There's no in-game music on the 128K version, either. Other than that it's fun to play, being both fast and responsive.



AMSTRAD CPC

■ The graphics exhibit that four-colour stippled effect that highlights this as a quick and dirty Speccy port (they haven't even tidied up the trackside scenery for flip's sake). Thankfully it's still very playable, but it's hard to look past the obvious lack of effort here.

COMMODORE 64

■ This version does replicate the scenery from the coin-op (and it's interactive), although it looks a bit messy and lacks detail. The cars are a little too big, which can make overtaking tricky, but overall this is solid attempt which delivers on playability.

ATARI ST

■ This is a brilliant conversion, being as close to arcade perfect as you could hope for on a home system. The only oddity is that you can't have in-game music and effects, it's one or the other, but that doesn't detract from this excellent effort.

AMIGA

■ The *Sprint* games skipped the poor old Amiga but *Badlands* was released for the 16-bit machine. Going head-to-head with the ST version it's a photo finish, but this just pips it thanks to enhanced audio and particularly the use of sampled sounds.

Tengen's take on the Atari coin-op was "an addictive cross between Road Blasters and Super Sprint". He continued: "Badlands is an enjoyable and challenging racing game, but as usual it's even more fun when there are two players racing." And that was the crux. The future aesthetic was great, and the addition of guns enhanced the gameplay, but it was the time-honoured player-vs-player battles that people wanted and Badlands delivered on that front.

Single-screen racers worked well on home systems so it was no surprise to see conversions announced. It was equally unsurprising to see Domark behind them, as the UK publisher had previously licensed a load of Atari arcade games including the Star Wars trilogy, Hard Drivin', APB and Xybots. Domark commissioned Teque London to produce home computers versions in time for Christmas 1990 and on the whole they worked well. Having to accommodate a secondary 'fire' button caused issues for joystick users, and most versions opted to use 'fire' for weapons and 'up' to accelerate. The Atari ST and Amiga versions were especially close to the coin-op, as you'd expect given the similar hardware. But as with the original, comparisons to the home conversions of Super Off Road were widely made and in most cases Badlands came

[Arcade] You know the drill: boost tires first to improve handling, then turbo (acceleration), and finally speed.

[Arcade] The top-down style, along with recognisable items like the wrench will leave you in no doubt of Badlands' legacy.

off second best. It didn't help either that several of Codemasters' Simulator titles were clones of Super Sprint and they were relatively inexpensive. The home versions did add some new elements, chiefly to make the game more challenging. Additional spike traps (those pesky obstacles that popped out of the ground) were added to most tracks and oil drums were introduced. Hit an oil drum once and it would set ablaze; hit it again and it would explode, taking out the player. 'Priming' oil drums was a fun way to irritate your rivals. Other than this the versions were faithful to the original, and it does make you wonder whether Domark could have done more. After all, Activision's home versions of Championship Sprint included a simple track designer mode that increased the game's long-term appeal.

No console versions were released and Badlands was largely forgotten about until 2005 when it featured as part of Midway Arcade Treasures 3. This collection gathered together eight racing titles, including Hydro Thunder, Race Drivin' and Super Off Road, and was available for PlayStation 2, Xbox, GameCube and PC. Some of the more recent games suffered from emulation issues, but Badlands was essentially the arcade version and it was pleasing to see its undeniable quality still holding up 15 years after its low-key debut.

TRACK MASTER

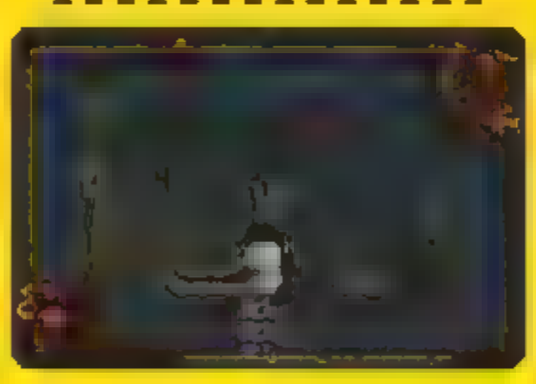
Playing tips and tricks for the game's eight circuits

THE CITY

■ The opening track offers a gentle introduction to this delightful dystopia. There's nothing to note except the top-left water tower can be knocked down on the second/reverse loop, creating a water hazard

OIL REFINERY

■ The classic figure-of-eight makes an appearance. Be sure to shoot rivals at the intersection to slow them down, and on the second loop, crack open the various trackside containers to spill oil all over the track.



THE VOLCANO

■ Watch out for the regular eruptions which leave lava on the track. On subsequent loops lava will randomly bubble up through the track surface as well. The gated shortcut in the top-left corner is not worth using

THE DESERT

■ This nondescript track hides few surprises, bar the central intersection where pile-ups often occur. There's an neat interactive element on the second loop: hit the rocks in the top-left corner to cause a rock fall

PRISON YARD

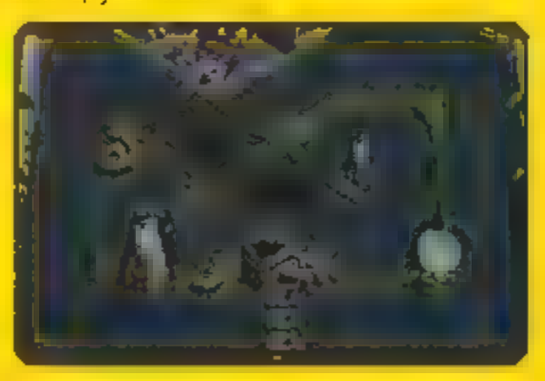
■ The first tricky track. There are multiple gates which offer excellent shortcut potential – if you can time it right. On the second loop the guard towers open fire on you, but they can be smashed down if you choose.

FREEWAY OVERPASS

■ A memorable track with a jumping element you need to build up speed to clear the gap. Also be sure to cut through the food joint's car park on the second loop you need to blast through the fence first.

MILITARY BASE

■ By targeting the gun and rocket placements you'll score yourself some bonus missiles (which you'll certainly need to finish in first place). The resulting wreckage also creates a hazard to slow-up your rivals



THE JUNKYARD

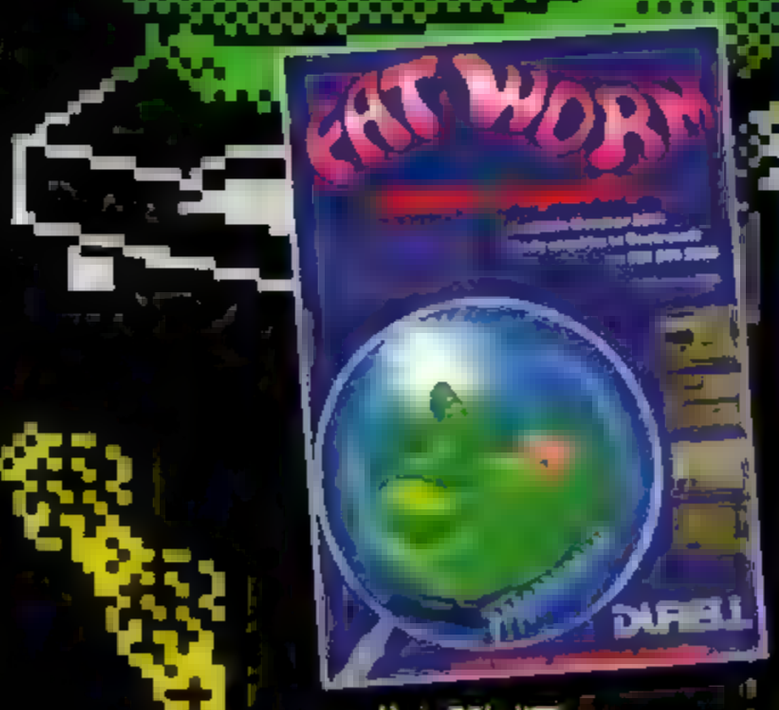
■ Probably the toughest track in the game, due to the sheer number of intersections. Ignore the electricity cable that falls onto the track, but do target the oil tanker in the centre to spill some of the black stuff

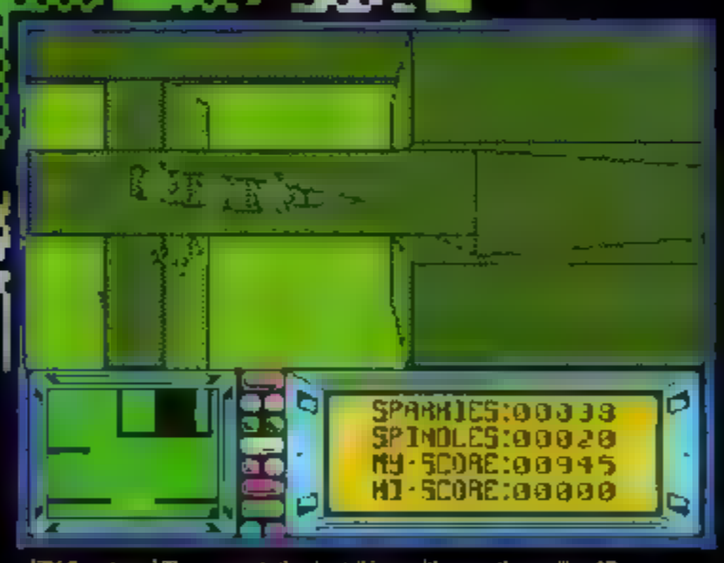
THE MAKING OF

Fat Worm blows a sparky

The Spectrum library is littered with off-kilter titles that often defy description. Here Julian Todd reveals the straight story behind one of the strangest games of them all

Words by Martyn Carroll





» [ZX Spectrum] The presentation is striking, with smooth scrolling 3D graphics providing a decent sense of depth.

IN THE KNOW

- **PUBLISHER:** DURELL SOFTWARE
- **PUBLISHER:** IN-HOUSE
- **RELEASED:** 1986
- **PLATFORM:** ZX SPECTRUM
- **GENRE:** MAZE GAME

Let's get the flippancy out of the way and start with the title. Fat Worm Blows A Sparky? "I distinctly remember Robert White coming in one morning with the name," says the game's author Julian Todd, referring to the boss of Durell Software. "He said that his wife thought of it while in the bath."

This curious admission raises further questions, but it's probably best to move on and talk about the game itself. After all, title aside, it's a serious piece of work. For Julian, Fat Worm was to be his 'magnum opus' following several smaller games he'd written with school friend Nick Wilson. The pair succeeded in selling their BBC Micro platformer Mineshaft to Durell, which was based in Taunton, 20 miles from their school in Glastonbury. Durell then commissioned the duo to convert Combat Lynx from the Spectrum to the Beeb. Nick went on to join Durell, and following his A-levels in May 1986 Julian joined him.

On arriving in the "Durell software attic" he began working on an ambitious 3D graphics routine designed to render polygons. Driven by the challenge, the idea for the game was secondary. It came later, in a moment of inspiration, when he was looking down at the streets of New York from the top of the World Trade Center. And so the idea of having a top-down view centred on the main protagonist was forged – only the protagonist wasn't originally a worm.

"I had little imagination when it came to game design," he says. "The main player was going to be a car. It's always a car, isn't it? You can apply more imagination when designing the enemies, and this worm I'd made was the biggest, most interesting animation of them all, so it would be crazy if it didn't become the main player. I think Robert recognised it was the right choice. The worm could fire fuzzy balls." Indeed it could. The city setting was swapped for the motherboard of the computer on which the game ran, the ZX Spectrum, and some simple game mechanics were sketched out. 'Wormie' was tasked with collecting 'Spindles' while shooting 'Sparkies' at the 'Creepers' and 'Crawlers'.

With the game design in place, Julian knuckled down – hard. "Durell paid me £500 per month advances on the royalty to cover the rent, and I was at the computer 24/7. Robert barely interfered.

[ZX Spectrum] If it moves, crawl away quickly or shoot it with a sparky.

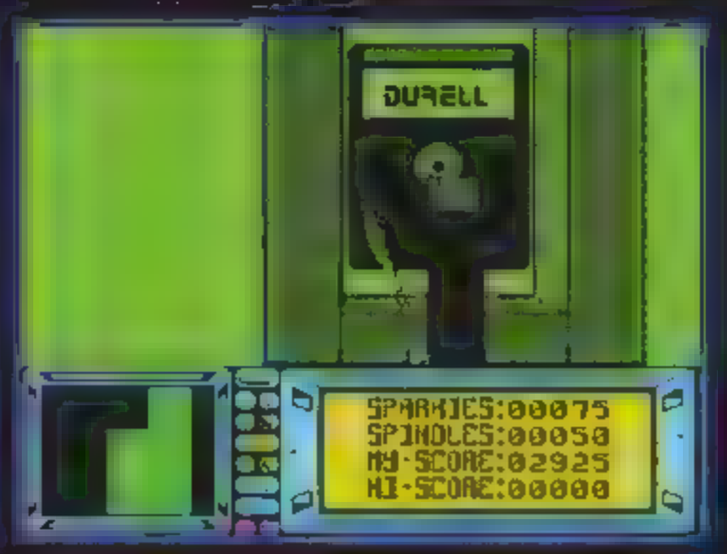
When you have someone working as hard as I was you leave them to it. He often went to the pub across the green and came back acting jolly. There were many interesting characters circulating around Durell at the time, but I spent too much time programming to take any notice."

Developers often recount tales of working long hours to meet publisher deadlines, but for Julian the deadline was self-imposed. "I was due to start university at the beginning of October so my deadline was absolutely firm. For the last five weeks I worked nights only, coming into the office at 6pm and leaving at 9am to go to bed. I barely got the game finished in time."

With the game completed (just), Julian departed Durell and started his degree in pure mathematics at Cambridge. Thanks to Fat Worm he was able to avoid student debt. "Robert was very honest," he reveals. "He paid 50p per copy sold and I got cheques totalling several thousand pounds during my first year of university." The game reviewed strongly, receiving 95% in Crash and 9/10 in Your Sinclair, yet this positive critical response didn't inspire him to repeat the process. "I took the rave reviews in the magazines for granted. I bought copies in the newsagents and showed them to my new friends in university – who were universally underwhelmed. There was no fan mail, or interviews, or invitations to discuss how I programmed parts of it. I would have loved that. I was completely isolated from anything going on in the business, as most programmers are, so there was no community to encourage me to carry on. My attraction was the intellectual challenge, and I was getting more than enough of that at university. I probably would have regretted it had I finished another game. They take so much effort to complete, and I wasn't mature enough to do it well or efficiently. I never developed the habit of spending money, so once I had a surplus, I could see no point in working hard to earn more."

And so Julian never completed another game after Fat Worm. The programming bug had bitten though, and several years later he learnt C and started coding again. He went on to spend a decade working on machine tool software and in 2009 cofounded the screen-scraping platform ScraperWiki. Today you can read his personal blog at freesteel.co.uk.

He reveals that over the past ten years he's received a steady number of messages from gamers asking about Fat Worm and he's gratified to see his creation live on. "I have completely lost all trace of the assembly code and even the physical product, so I am very grateful that the game has been preserved," he says. "I would be most fascinated to see a disassembly of the code into its constituent Z80 functions. I'd like to study it and find out if I am a better programmer now than I was then. I hope so." ★



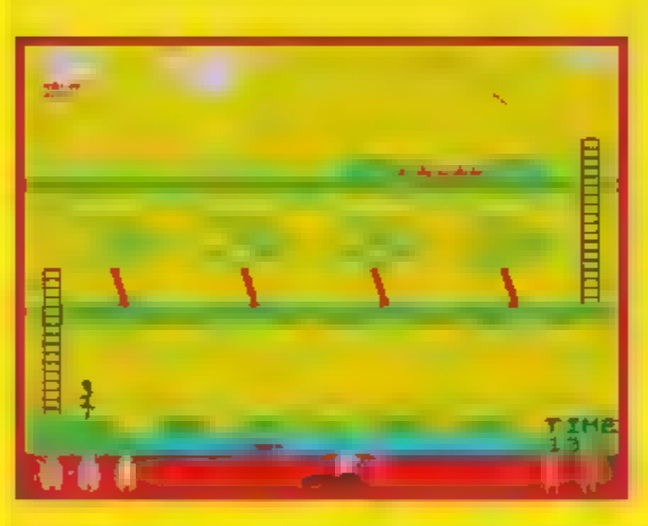
[ZX Spectrum] The overall aim of the game is to collect 50 spindles so that Wormie can clone himself using the disk drive.

SPECTRUM 4EVER

Durell always considered the ZX Spectrum to be its main platform and in 1987 it released an exclusive four-game compilation exclusively for the machine. *Spectrum 4* featured *Fat Worm* plus three early hits plucked from the firm's back catalogue.

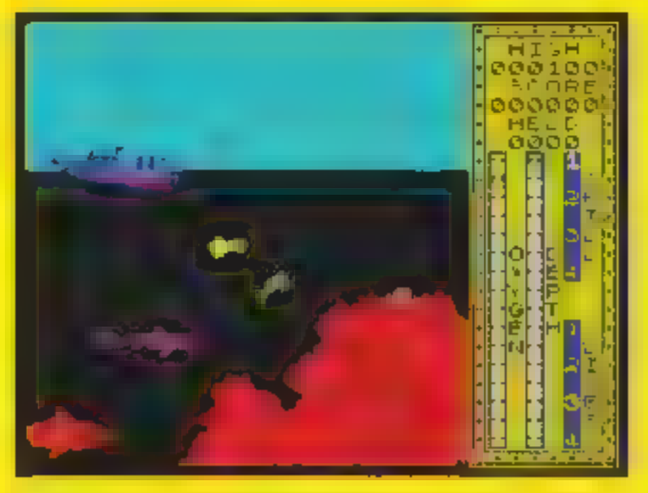
HARRIER ATTACK

■ The game which saw Durell take off, much like the jump jet which it featured. This very simple horizontal shooter debuted on the Spectrum and Oric-1, and was later enhanced for the C64 and Amstrad CPC. It was an absolute smash, selling more than 150,000 copies



JUNGLE TROUBLE

■ Durell's star programmer Mike Richardson followed up the Spectrum version of *Harrier Attack* with this single-screen platformer. Not one of Mike's finest moments: the controls were squiffy and it was super tricky. Did anyone manage to make it to the top of the screen?



SCUBA DIVE

■ This underwater maze game showed what Mike could do with 48K of memory (his previous games were squeezed into 16K). The objective of collecting treasure was secondary to exploring the vast network of caverns and avoiding the submarine monsters.

35 YEARS OF THE AMSTRAD CPC 464

CODEMASTERS

The chart-topping CPC 464 budget title specialist

SUPER ROBIN HOOD

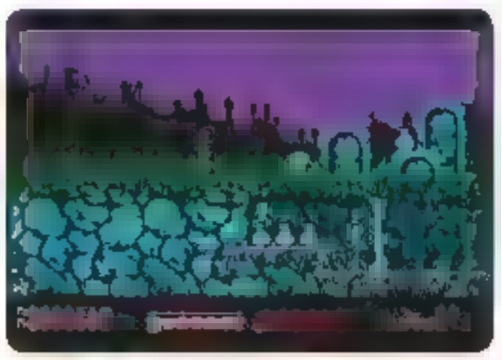
■ Although far from original, the Olivers' 16-colour platformer plays to the CPC 464's strengths and is challenging without being impossible. This is mainly thanks to *Super Robin Hood* having a health bar rather than instant deaths, which places the focus of the game on collecting inconveniently placed items, rather than trying to overcome deadly obstacles. The game's catchy tunes help to urge you on, and its varied speech samples nicely punctuate the action.

DIZZY

■ There's less platforming in the Oliver twins' debut *Dizzy* title than in *Super Robin Hood*, but this is reasonable giving the game's emphasis on puzzle solving. *Dizzy* uses the CPC 464's four-colour mode, but the limited palette is used cleverly, with the result being highly attractive visuals. Looks aside, *Dizzy* is one of the system's most appealing adventures, and this comes down to its clear objective of overcoming obstacles with related objects.

PRO BMX SIMULATOR

■ Designed by Richard Darling but coded by Philip and Andrew Oliver, this is an improved version of the Codies' bike-racing original *BMX Simulator*. Rendered in the CPC 464's 16-colour mode, *Pro BMX Simulator* has nicer graphics than either the brightly-hued Spectrum version or the less vibrant C64 iteration. *Pro* has four competitors to the original's two and an 'expert' mode with shorter countdowns and collisions between racers.



CRYPTS OF TROGAN

■ Just barely a budget title, *Crypts Of Trogan* sold for the princely £3.99! But the CPC 464 version looks and plays just like a full-price adventure. Like *Dizzy*, *Crypts* uses the 464's four-colour mode to great effect, but instead of puzzles it revolves around combat with magical creatures, hazard-filled platforming and collecting spells and parchments. When loaded on a plus model CPC, *Crypts* has extra colours and better scrolling.

The CPC 464 launched years after its rivals, but it subsequently received quality ports, acclaimed originals and top budget titles. Retro Gamer discovers why the 464's games library still holds up 35 years later

Words by Rory Milne

By the time of the CPC 464's April 1984 launch, the UK home computer market had all but been carved up between the ZX Spectrum and the Commodore 64, however work on the 464 had begun in early 1983. Much later that year, following a disastrous start, Amstrad recruited a team led by Roland Perry to get things back on track, as the former hardware consultant explains. "It was absolutely critical to get the 464 to market for Christmas 1984, which is why we were approached in August 1983," he says. "Amstrad knew that unless it did something really drastic that the 464 was never going to happen. So we were given a timescale to get the project rescued, redesigned and relaunched as an internal manufacturing and distribution project by the middle of December 1983. It was a short period of time – it took about a year to produce a computer like that, but we said 'Well, we're mad enough that we'll give it a go!'"

One aspect of the 464's design that would ultimately define its games library was its implementation of three distinct display modes, but as Roland points out these were largely beyond his control. "The graphics modes were decided very early on, because by using the graphics controller chip that it was obvious to use there basically wasn't anything else that you could make it do. So you had the three modes – multicolour, high resolution and the four-colour mode, which kind of fell between two stools, really."

Besides configuring the 464's graphics chip, Roland's team had an entire prototype to construct, which it duly completed as 1983 drew to a close. "I got on a plane to Japan at Gatwick on the Friday of the first week of December 1983 with a prototype under my arm and one of the engineers in tow," Roland says. "We went to the factory because it had said, 'If you want us to build a production line to make this product for you to sell next Christmas, then we need to be shown a prototype working by the end of the year.' So we stayed a week and a-half in Japan showing it to them, and then they said 'Jolly good. We'll build a production line for it.'"

Once back in Britain, Roland switched his focus from demonstrating hardware to sourcing software to accompany the 464's arrival in shops the following year. "The 464 was entirely designed to play games on, that was built into its specs," Roland notes. "Where it was built into its business model was that we were only going to be selling it in high-profile high street retail, and we couldn't just put a naked hardware platform in that kind of environment and hope people would buy it on the assumption that later there might be some games for it. So the idea was to have 50 games from third parties available at the time of the launch."

Quite unintentionally, however, Roland's requests to software houses for 464 games led to Amstrad setting up its own publishing department. "We had people coming to us and saying 'Look, I've got this game. Would you like to publish it for me?'" Roland explains. "So ▶

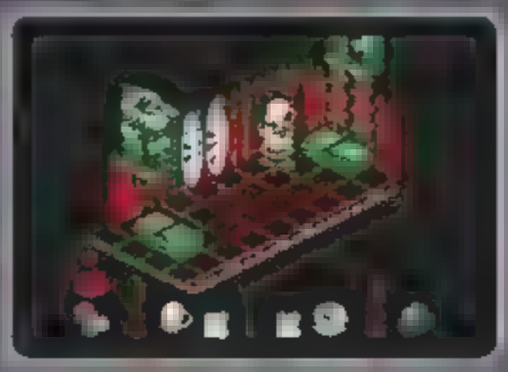
» [Amstrad CPC] The Amsoft label supported the CPC 464 from its launch with great games like Strangeloop

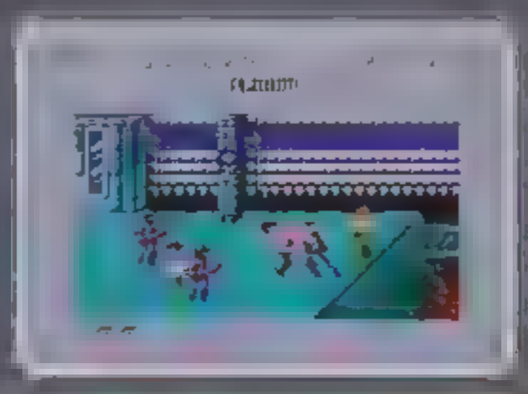
OCEAN SOFTWARE

The conversion king that excelled on the CPC 464

HEAD OVER

It's difficult to exaggerate just how good Jon Ritman and Bernie Drummond's masterpiece is, and the CPC 464 adaptation is arguably the best version. Think *Knight Lore*, but with surreal humour and alternating player characters. Alright, *Knight Lore* had Sabreman changing into a werewolf, but the two protagonists were largely interchangeable, whereas the puzzles in *Head Over Heels* can only be beaten by one particular hero, or both, working together.



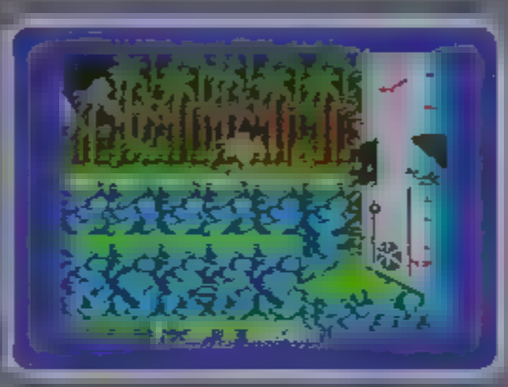


RENEGADE

Double Dragon – the spiritual successor to *Renegade* – may have a higher profile thanks to its success in the arcades, but in terms of CPC 464 conversions *Renegade* beats *Double Dragon* bloody. The 464 *Renegade* is also better than the excellent C64 and Spectrum ports of the rock-hard brawler, and what gives it the edge are its stunning 16-colour visuals, which are incredibly faithful given the hardware gap between the 464 and the coin-op.

GRYZOR

Firstly the negatives: the opening stage of the 464 version of Konami's run-and-gun doesn't scroll like its arcade inspiration does. Actually, that's the only negative; every other aspect of the conversion delivers from its beautifully rendered multicolour graphics to its hard-as-nails gameplay. What's interesting is that *Gryzor*'s into-the-screen sections look just as good as its side-on stages, which is a testament to the talents of artist Mark K. Jones.



Into-the-screen racers tend not to look great after they've been crammed into the CPC 464. *Chase HQ*, however, is an exception to the rule. Obviously there are graphical concessions, but the 464 conversion has stunning visuals that actually improve on the coin-op's colour choices. It's not as fast, but the arcade original's intense vehicle-ramming survives the translation with style.

» [Amstrad CPC] Although a Spectrum original, Knight Lore looks more colourful and sounds better on the 464.

▶ we became, almost by accident, a games publisher. That's where Amsoft came from. It was entirely to support the main business, which was selling the hardware. I don't think it ever made any money, but it was important because if it hadn't existed we wouldn't have sold hundreds of thousands of 464s. So Amsoft was a catalyst in a sense."

By 1985, Amsoft had become synonymous with 464 gaming, with its main output being conversions of popular titles – a tactic third-party publishers were also employing, as developer Jon Ritman recalls. "I didn't know the 464, and I didn't really think it had much of a market at the time," Jon concedes. "so Ocean just said, 'Oh, we're going to get Match Day converted.' But the developers converting it really didn't give a shit, so as a result the game was awful. That was why my future 464 games were programmed by myself."

Among Jon's 464 titles was a superior Match Day sequel, and, just as noteworthy, enhanced conversions of his and artist Bernie Drummond's isometric Spectrum hits Batman and Head Over Heels. "It was lovely having the ability to do a high-res screen in four colours – it made a world of difference to what you could do," Jon says of adapting his isometric titles to the 464. "Against that it was slightly slower because you had more data to shift around, but for the isometric games I don't think it made much difference. Although Match Day I was a bit slower, as it had a lot of heavy graphic work to do."

Due to the 464 and Spectrum's processors having more in common than their colour handling, however, Jon spent far less time on converting his acclaimed isometric adventures than his artistic development partner. "I had hardly any extra code to write for the 464 – probably did that in a couple of days," Jon reflects. "But Bernie would design the graphics on the Spectrum, and then he would take them to the 464 and colour them in, and because of the 464's colours you could do things that you couldn't on the Spectrum, so some of the graphics changed quite a lot between the versions. Quite often if you were working in a mono palette for the Spectrum you had to make things stand out by having a border around them, but on the 464 that wasn't as necessary because you had the change of colour, so they required a fair amount of work on his part to make them look good."

Around the same time that Jon and Bernie's four colour mode Batman was released, a hit French 464 isometric

» As well as making Get Dexter, Remi Herbulot ported Macadam Bumper to the 464.

» [Amstrad CPC] Some fantastic 464 coin-op ports were released on the Imagine label, such as Yie Ar Kung Fu.

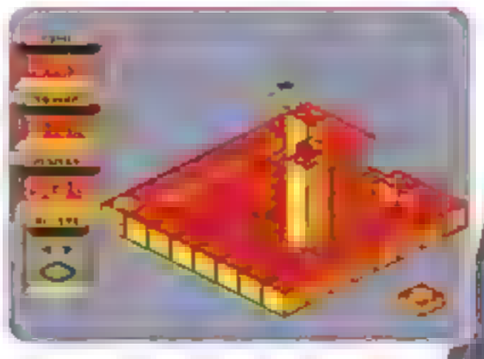
"IN BRITAIN, THE 464 ALWAYS SEEMED TO PLAY THIRD FIDDLE TO THE C64 AND SPECCY"

Mark K Jones

title called Get Dexter arrived in Britain, rendered in 16 hues thanks to its developer Remi Herbulot favouring the system's multicolour mode. "When the 464 arrived in France in January 1985 the few game developers were doing things for the Oric mostly," Remi recollects, "so we all jumped on the 464 as it offered so much more. I loved that computer. It was definitely the graphics. We had more freedom to create colourful sprites on elaborate backgrounds. [...] We were a little late in France, compared to Britain, where there were plenty of games made for the Spectrum, so very soon we were doing new games for the 464, as we didn't have so many to convert. I was always trying to do things that had never been done before, to go further than others. Clearly, Britain was ahead of France, but we wanted to catch up."

A wave of French 464 titles followed Get Dexter into the UK, many of which were very well-received. Noted British 464 artist Mark K Jones remembers the visuals that defined this revolution. "I really admired the French stuff," Mark says. "In Britain, the 464 always seemed to play third fiddle to the C64 and Speccy, and it got some bad 'hand-me-downs' in terms of games. The French seemed to latch on to it, and saw it as the stellar art machine I believe it was."

Conversely, British artist Nick Bruty wasn't as convinced about the 464's capabilities when he created his ▶



▲ [Amstrad CPC] Paul Shirley's challenging but compulsive puzzler Spindizzy was originally designed for the 464

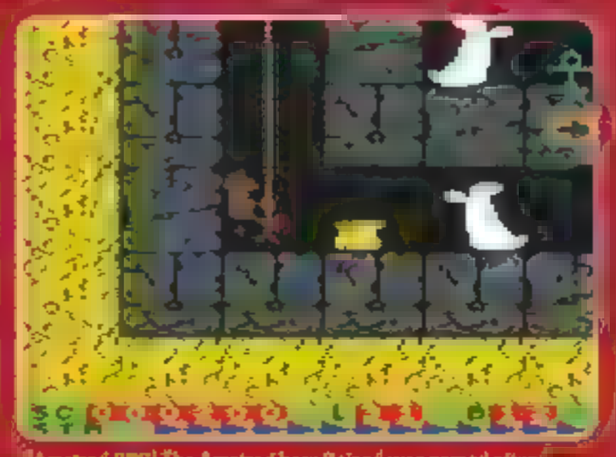
▲ [Amstrad CPC] The 464 received an excellent conversion of Firebird's Gauntlet-inspired multiplatform hit Druid

THE CREATOR

Team leader of the CPC 464 project Roland Perry looks back at his creation

Was the 464 designed with conversions in mind?

We designed a computer to a spec, which we knew had some decent graphics modes in it, and we knew there were graphics modes in other computers, like the Spectrum and C64 and BBC, which were broadly similar. We were obviously trying to encourage people to convert their games, but we weren't second-guessing what modes they would want.



How did you feel about the Spectrum/464 ports?

I don't think I would say that they were particularly better or worse, they were just the same thing on a different platform. At the time, I don't remember anybody coming along saying: 'Let's play this game on the Spectrum because it looks shit on the 464!' But it did take a while for people to start to use the facilities of the 464, and once they got the hang of it some of the games were a bit better.

Did Amstrad mandate demanding 464 exclusives from publishers?

I've no recollection of taking that kind of approach to things, no. What we wanted was an open platform. The whole idea of the 464 was that the more open you made it the more software there would be and the more hardware you were going to sell. The idea of tying people into a proprietary platform didn't appeal to us.

Why did Amstrad focus on quantity over top-quality?

I don't think anyone can build a business on only selling absolutely top-notch stuff. You've got to have a range, and then leave it to the consumers to decide what they buy. And when you had magazines being published with reviews in a lot of people would look at those and think: 'Well, maybe I'll buy this one instead of that one because of what the reviewers have said.'

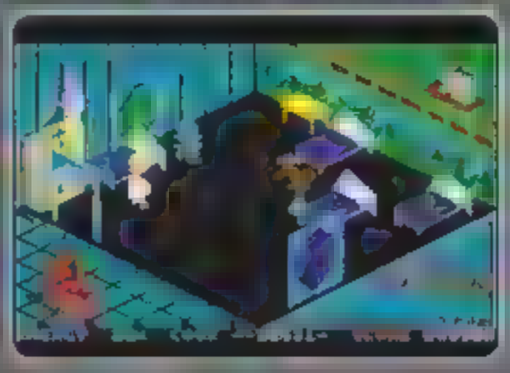
What are your feelings towards the 464 today?

Well I look back at the 464 with great affection. I'm very proud that it got to the critical mass that it did, that people liked it and cherished it, and carried on buying them and using them, and that there's still this huge fandom around the 464. I think that in a sense the whole design was so simple and elegant that it did everything it needed to do on day one.

464 CLASSICS

THE INFORMATION

The French firm that played to the 464's strengths



■ The CPC 464's 16-colour mode is an interesting choice for an isometric adventure, as its low resolution doesn't lend itself to the depiction of detailed scenarios and characters, but Remi Herbulot and Michael Rho excelled at doing just that when they created *Get Dexter*. As well as having to rearrange furniture to access doors and hidden items, Remi and Michael's game also requires you to pacify opponents and extract codes from scientists.

■ *Doomsday Blues* has unusual mechanics, but as French 464 games go it's par for the course. Rather than finding keys, *Doomsday*'s protagonist kicks open locked doors, which drains his strength until he replenishes it with food. Walking around saps his health but this can be restored with wine, and then there's his bravery when he encounters guards, which can be topped-up with coffee. Ere's title also shifts jailer's locations using a day and night cycle.

■ An Atari ST original, but the CPC 464 received an excellent conversion. *Captain Blood* is as much an experience as it is a videogame, with its premise being to find and kill your clones by landing on planets and getting intel from their inhabitants on your doppelgangers' locations. Landing on a planet requires skilful piloting, and comms with the planet's denizens are conducted in their language, which heightens the game's sense of immersion.

■ *Purple Saturn Day*'s appeal has as much to do with style as substance, but its absorbing design matches its flashy 16-colour visuals. Essentially a sequence of minigames, *Purple Saturn Day* tests players' reactions in a lightning-fast into-the-screen obstacle course, drops them into a first-person arena version of dodgems with collectible energy balls, challenges them to build a brain with microchips and tasks them with catching stars to fuel a hyperspace jump.

THE EDITOR

Former Amtix editor **Jeremy Spencer** on Newsfield's 464 magazine

What were your first impressions of the CPC 464?

When Amstrad launched the 464 it got everybody pretty excited because it seemed to be much more together than the Spectrum. Amstrad published a whole range of back titles, and some original games, but none of it was much good. So the CPC 464 wasn't immediately a games computer: it was a computer that could do games.

Why did Amtix launch much later than the official CPC 464 magazine?

We were too focused on the magazines that we were doing. *Amstrad Computer User* magazine was very much in-house and got all the reviews because it got everything early. But about six months later we realised what an appalling job they were doing and realised that we had left a bit of a gap.

So how did Amtix come about?

I just suggested that we get on and do an Amstrad magazine. We wrote a script for a Spectrum, and made it run through a whole bunch of random words, and we were rather joyous when among all of them was Amtix! So that's pretty much how we did it. Like everything we did in Newsfield it was all done on a bit of a whim, really.

Was following magazine maker Future's move [illegible] a big blow?

Can it be tough. How hard was it to get Amtix up and running?

The biggest problem we had was getting screenshots. At the time they were done by camera, and the Amstrad monitor was particularly horrible. So that made getting screenshots a lot harder than it had been for the Spectrum.

Why do you think 464 games improved from mid-1985 onwards?

Some of the kids were beginning to exploit the 464's particular hardware features, and it took a while to do that.

What did you think of Spectrum-to-464 conversions?

As long as the conversions were roughly equivalent I didn't mind. But I think by then I was using the keyboard for word processing and stuff rather than playing games – I was the least enthusiastic gamer at Newsfield!

Why did games publishers support the 464 for so long?

Ten years *is* a long time. There was more support for the 464 outside Amstrad than there was in it, and I think that's probably what helped its longevity.

« Nick Bruty's 464 resume is filled with classics

« Bill Harbison's Chase HQ visuals still impress today

▶ first visuals for the system in late 1986 "mpossible M ssion was a challenge, because was going to a ower resolution, and the Amstrad's 16 colours weren't helping me there," Nick admits. " was confronted with that really high-res C64 sprite running so smoothly That was the centre of what that game ooked ike the animations and the rolls and stuff ike that. So that was tough."

An introduction to the gifted and industrious coder David Perry did a ot to change Nick's view of the 464, however, and he became a fan when their stunning debut 464 collaboration Trantor outshone the Spectrum ongina "I always expected Amstrad conversions to be a little slower, just because of the size of the screen and everything," Nick reasons, "but Dave Perry made the difference When I saw that the Amstrad Trantor was running faster than me and David Quinn's Spectrum version that just blew my mind! stil wasn't a fan of the Amstrad's 'fat pixel' mode, but could see the benefit n a big character If we had started Trantor on the Amstrad then there probably would have been more stuff n the game, it would have naturally been just a bit bigger and more detailed, because there were just more things to play with on the Amstrad."

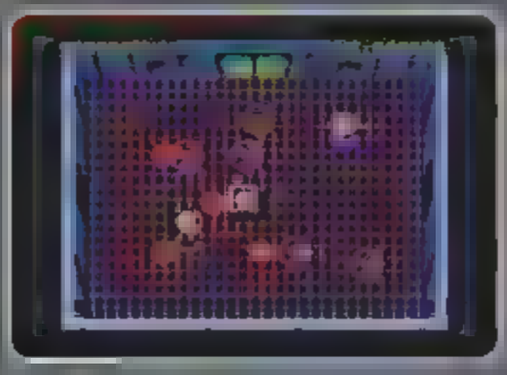
PC 464 CLASSIC

PROBE

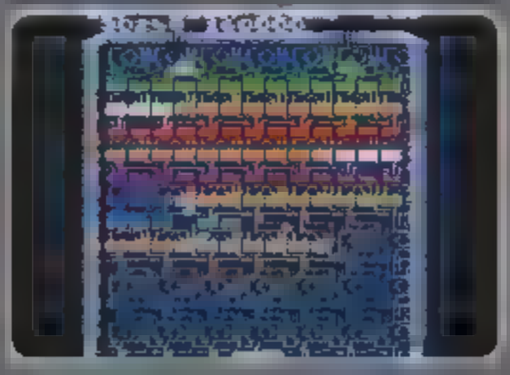
The hit factory that pushed the 464 to its limits

■ Coder Dave Perry and artist Nick Bruty worked miracles on the CPC 464, and it all started with their scrolling run-and-gun *Trantor*. Based on Nick's Spectrum original, the pair's 464 conversion eclipses its inspiration by adding arcade-like in-game sound effects and incandescent 16-colour explosions that light up the game's *Alien*-inspired stages. The extra hues of the 464's multicolour low-res mode also allow the 464 version to match the original for detail

■ A successor to *Trantor* of sorts, in as much as the first stage of Dave and Nick's *Savage* favours side-scrolling firefights, although guns are swapped for axes and there are many more bosses and even more pyrotechnics. In an eclectic move, stage two channels *Space Harrier*, while the game's third level boasts eight-way scrolling and a giant eagle. As with *Trantor*, the 464 version of *Savage* looks and plays better than Dave and Nick's Spectrum original



■ Another of Dave and Nick's CPC 464 projects for Probe, but an arcade conversion rather than an original game, *Smash TV* somehow recreates the frenetic chaos of Eugene Jarvis and Mark Turmell's top-down shooter on the humble 464. The stages that are peppered with opponents and power-ups in the arcade original are replicated in 16-colours without slowdown, as are the coin-op's massive over-the-top bosses

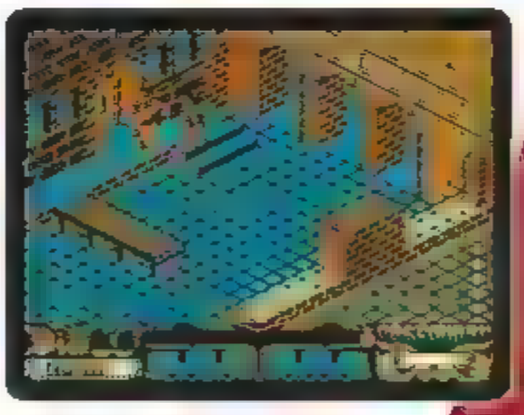


■ An equally well-received coin-op port from Probe, although not one of Dave and Nick's. Taito's colourful evolution of Atari's *Breakout* was seemingly designed to be converted to the CPC 464. The system's multicolour mode was the obvious choice when adapting *Arkanoid*'s rainbow-hued blocks, and that's exactly what Probe used. In terms of gameplay, the 464 replicates the arcade original's block bashing, although it runs a little slower

The talented pair followed up Trantor with two more titles that seemingly pushed the 464 to its limits. Savage and Dan Dare II, before creating a series of hit licence-based titles for the system, but Nick feels that they could have got even more out of the 464. "We were really just trying to push as much colour and motion to the screen as possible, and that suited the Amstrad," Nick argues, "but I don't think we ever reached its limits. I think the market was falling away at that point, and we were moving towards 16-bit consoles before we peaked. It's a shame, but I don't think we ever got to the point where we just focused on its strengths. With Dan Dare III we were definitely pushing the screen as much as we could with our current engine, we were getting into multidirectional scrolling finally, but I think we could have gone further with the Amstrad than Dan Dare II, for sure."

Ocean artist Bill Harbison had a lot less exposure to the 464 than Nick, but Bill and coder Jon O'Brien's 464 port of the popular coin-op Chase HQ is still considered one the system's best arcade adaptations. "I'd never used an Amstrad before I started work at Ocean, so I wasn't even sure if I was going to be able to do it," Bill says of converting his Spectrum Chase HQ visuals to the 464. "I quite enjoyed being able to use that amount of colour. The pixels were a bit fat, but the 16-colour mode gave me a better chance to make the graphics as much like the arcade version as I could. We were doing our graphics on an ST in black and white, so I was then able to take the original sprites and plot double-width pixels over the top of them – it was just re-colouring my own graphics. The Amstrad versions always seemed to be an afterthought. We put so much time into doing the engine for the Spectrum version, which probably took six months, and then you would have like six weeks to do the Amstrad version. I've often wondered why we didn't spend as much time on Amstrad titles as we should have. I think the only person who did was John Brandwood, who did the Amstrad Gryzor – he was basically called 'Johnny Amstrad'!"

Artist Mark K Jones partnered with Ocean's 464 coding specialist John Brandwood on two coin-op conversions – Renegade and Gryzor, which he feels were suited to the 464's low-res 16-colour mode and were better for not scrolling. "I enjoyed the detail in the four colour mode, and for some art pieces I used it, but for games I felt the 16-colour mode was better," Mark considers. "At the time, most people seemed to use the 464 on a telly, not a monitor, so there was always some 'fuzzy bleed' that somewhat hid the pixels, so they didn't seem as 'blocky'. I enjoyed the challenge of trying to match the arcade quality of the machines we were trying to ▶



» [Amstrad CPC] La Abadia Del Crimen is a compelling 464 original that's far better known in its native Spain

» Amstrad CPC: Barbarian on the CPC 464 retains the C64 original's gore, but it's rendered in eye-popping colour

THE ARTIST

Graphics wizard Mark K Jones on making beautiful visuals for 464 games

How did you find creating visuals on the CPC 464 and its rival home computers compared?

The CPC 464 was [my] computer [I bought] myself, and it was the machine I used to create all my portfolio work. It was my favourite art tool to use when it came to creating visuals. I found it much easier to work with it. On the C64 it always drove me bonkers working around the limitations, and I never really got a chance to use the Spectrum.

Did you enjoy working on your 464 games or being quite constrained?

I'd just started working at Ocean/Imagine [and] was my first job; I jumped at the chance to work there and never pursued a university education. So I just did what I was told to do. I obviously had ideas for other games, but I'm still shy, but I was 18 years old and green and I didn't think anything of it. I didn't really care what I worked on. I was making computer games!

Why do you think the CPC 464 May Mac[Mac] reviewed so well?

May Mac[Mac] was a game I worked on over a very short period. The original assets weren't doomed out to standard, and I was given them to redo in a way that was nicer. A lot of the technical aspects had been worked out. So it was just pure artwork doing for me, and perhaps that helped. But I have no real idea why the reception was

How did you find working on the Amstrad version?

It's good for the Amstrad version, I was certainly very colourful.

How did you feel about moving on from CPC 464 development?

There's only so much you could do with a small sprite in low resolution, and the 16-bits allowed more of an artistic style and skill to shine. I possibly had not enough of either. It took a while to find my groove.

What do you think about your CPC 464 games now?

I'm glad people remember them. It's gratifying to know I worked on something that brought fun into their lives. They took months to create, and then we could see them in the shops soon after, but I'm not sure I miss creating my artwork pixel-by-pixel using cursor keys.

» Amstrad CPC Nick Bruty and David Perry's 464 Dan Dare has eight-way scrolling as well as pyrotechnics

» The Olivers developed numerous 464 originals at pocket-money prices throughout the late Eighties

emulate. That's why I thought the 16-colour mode was a better match – it gave that same 'look'. I agonised over every pixel, going back over the sprites again and again until I couldn't improve them. But I liked working on the Gryzor conversion, I was fairly happy with the artwork. Although one thing the 464 did suffer from was that it couldn't scroll very well. All those colours meant lots of memory to move around, and to be honest it did struggle."

But as well as full-price 464 coin-op conversions like Renegade and Gryzor, the 464 games market of the mid-to-late Eighties was also home to some great budget originals, such as those developed by Philip and Andrew Oliver. "The first big hit was Super Robin Hood, and then we followed it with Ghost Hunters," Philip enthuses. "We made the argument to ourselves that if you sold a game at a quarter of the price you would sell four times as many copies. But customers expectations wouldn't be as high, so it would review better, and you wouldn't have to do so much work because people wouldn't expect such a huge game. So that was our logic, and it played out pretty well, I think."

The Olivers' strategy didn't guarantee smooth sailing, however, as they soon found themselves competing with high-quality back catalogues sold at low price points. "There was a big move in about 1987 where it got quite difficult to sell full-price games," Philip reflects, "as there were a lot of re-releases. US Gold and other firms started doing the Hit Squad and other labels like that. Basically, they were re-releasing full-price games six or eight months after their original release but down to budget prices. So we were like: 'Crap. We're up against that lot now.'"

The twins' response to the budget re-releases was to up the quantity and quality of their 464 output, which included well-reviewed simulators and three cracking arcade adventures starring a hero called Dizzy, although they stopped developing for the 464 at the end of the decade. "The Amstrad market was dying, and we knew that it was going to be very difficult to sell anything after Christmas 1989," Philip acknowledges. "The Amiga and ST had been on the market for three years by that point, and pretty much anyone who was a gamer had upgraded, and we were now only able to sell to people who didn't have much money or had a hand-me-down machine."

The very last of Philip's designs to be ported to the 464 arrived in early 1993 – long after the system's commercial prime, but it proved far from profitable, as the designer is quick to admit. "It got harder and harder as every year went past, and 1993 was the end of it," Philip says of the fading 464 games market. "Robin Hood: Legend Quest was pretty much our last Amstrad game. It probably broke even on its costs."

As 1993 progressed, the majority of 464 games being released were budget titles – and these were mainly re-releases, but then former demo scene coder Elmar Krieger landed a contract with Titus Software to produce two full-price 464 titles based on forthcoming PC games. These titles were Super Cauldron and Prehistorik 2, and as well as boasting great game design, they used every technical trick in the book to squeeze every last ounce of performance from the system. "After six years of CPC hacking with demos and games – the largest project being a Pang remake called Zap'T'Balls – this felt like the right finish for this life chapter," Elmar explains. "With my CPC-only know-how, no company would have hired me to develop its next Amiga blockbuster, so the CPC's decline was probably the main reason why Titus dared to outsource this job to an external dev like myself. But no matter how hard you worked, and which tricks you came up with, it was just not possible to turn a CPC into an Amiga, so I think I went as far as it was fun to go."

» Amstrad Action was the very first magazine that Future published and later included free covertapes

Elmar subsequently left 464 development behind, and between late-1993 and late-1994, the flow of commercial 464 games finally dried up, with the last few notable releases being distributed by mail order. Looking back at the 464 now, the former developer feels great nostalgia for the system tempered by relief that technology has moved on. "We all know that our brains tends to glorify the past," Elmar muses, "but to me the CPC era feels like the time of never-ending wonders and excitement. On the other hand, if I was offered a ride back into my younger self the need to do software development on a CPC again would make me shiver!" Former budget title specialist Philip Oliver also cites nostalgia when asked to explain the 464's lengthy commercial lifespan. "The Amstrad definitely had a really good fanbase," Philip observes, "and it was an elegant system; it was plug-and-play. Even if technically the Amiga pissed all over it later on, there was still nostalgia for the Amstrad and what it could do. There was a lot of love there, and the minute

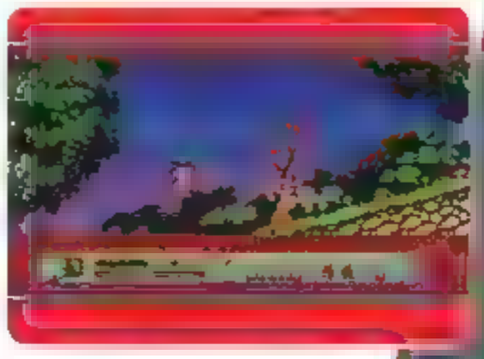
» [Amstrad CPC] French developer Remi Herbulot left CPC game design behind after 1987's Get Dexter 2

"WE ALL KNOW THAT OUR BRAINS TENDS TO GLORIFY THE PAST, BUT TO ME THE CPC ERA FEELS LIKE THE TIME OF NEVER-ENDING WONDERS"

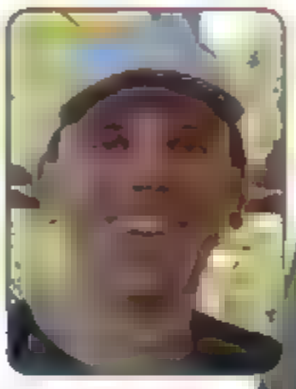
Elmar Krieger

you packed it up in a box that was a sad day, so a lot of people just didn't do it." Reviewing the long-running success of the 464 in France, celebrated developer Remi Herbulot credits this longevity to the sheer number of systems sold in his home country. "Get Dexter 2 was the last game I did on the 464, in 1987. I stopped working on the 464 when the ST and Amiga arrived," Remi notes. "But there were many French 464 games out after that, probably because many unprofessional developers were programming on their own computers and most owned a 464, as the 464 sold very well in France."

Given the final say on the CPC 464, Roland Perry considers the six years of production enjoyed by the system and its ongoing popularity. "I was a bit surprised that Amstrad was still selling the 464 two years after its launch," he says, "because in those days platforms did churn very quickly, and you were lucky if your computer had that kind of lifespan. But if you could just hit the spot with them then they did go on a remarkably long time, and once the 464 became a classic it gained its own momentum." ★



» [Amstrad CPC] Elmar Krieger pushed the 464 when he converted Super Cauldron to the system in 1993



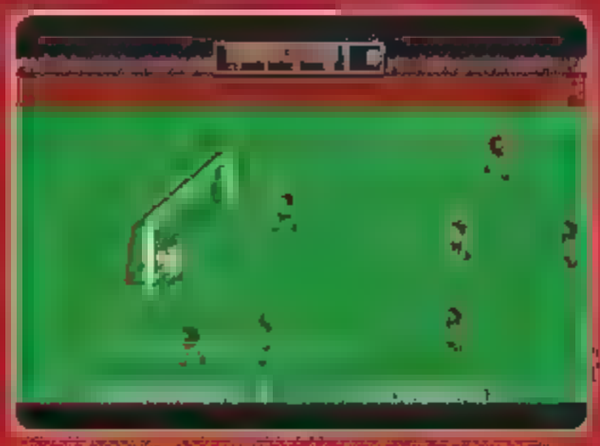
» Elmar Krieger worked on Super Cauldron and Prehistorik 2

THE CODER/DESIGNER

8-bit maestro **Jon Ritman** on his and Bernie Drummond's 464 masterpieces

[illegible] the colour schemes for [illegible] 464 games devised?

The colour schemes were both of us. They weren't random, we chose them. We'd play with combinations, and they would usually end up with silly names. There's only one of which I remember, which is 'Ice Cream And Green' – it was a light yellow colour and a green, but we had nicknames for all eight colour schemes. The whole system revolved around getting everything as tight as possible in memory, and so we were limited to eight. I thought that was enough, and the schemes we used were nice. You had to have a certain level of artistic ability to look at a colour scheme and think, 'That works,' or, 'That doesn't work.'



Why didn't you use the CPC 464's [illegible] mode?

I wouldn't have used it for the reason that it was lower resolution than the Spectrum. Bernie would have had to redesign everything, and that would've been a nightmare. The resolution wouldn't have been enough, it would've been horrible to look at. You would've lost that detail, you would've lost much of the beauty. So the 16-colour mode was out of the question for *Batman* and *Head Over Heels*.

How did *Match Day II* [illegible]?

The scrolling was painful on *Match Day II* with just *four* colours, but nothing in *Match Day II* would have looked good in the 16-colour mode – the ball wouldn't have even looked round! I suppose I could have scrolled the screen for *Match Day II* in 16-colours, but it would have looked dodgy because all of the curves would have looked funny.

[illegible] your best ever CPC 464 [illegible]?

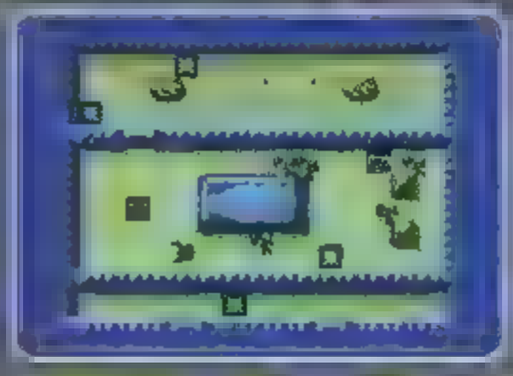
I don't know if *Match Day II* has aged that well. The scrolling is noticeably slower than the Spectrum. I think it was great for its time, but my 464 isometric games have without a doubt stood up better because the speed doesn't matter so much, so they've stood the test of time.

Have you any final thoughts on the CPC 464 *Match Day*?

The 464 *Match Day* is best forgotten. It wasn't my game at all. The developers didn't use any of my code, they just made a football game up, and it was a shit one.

464 CLASSICS

The original games publisher that made the 464 shine



■ Graftgold's *Paradroid* was a Commodore 64 exclusive, but the firm's *Paradroid*-inspired *Ranarama* was ported to the CPC 464, and while it plays just like the Spectrum original it has better visuals. Like *Paradroid*, *Ranarama* has a top-down perspective, and until entered its rooms' contents are a mystery. It also takes influence from RPGs in that its spells are cast with various runes won from mages in the game's *Paradroid*-like minigames.

■ The Spectrum original of Raffaele Cecco's *Exolon* doesn't lack colour, but his vibrant CPC 464 port makes it look drab by comparison. It also plays well with each of its 124 stages requiring platforming strategy and a steady trigger finger in order to safely make the journey from the left to the right of each screen. It's easy to run out of bullets and missiles although more can be found every few stages, but there's only one exoskeleton suit per section.

■ You would imagine that you would miss the fish-blasting minigame from the C64 original of *Nebulus* when playing the CPC 464 conversion, but you really don't. In fact, *Nebulus* is so defined by its rotating tower that it's easy to forget that the original ever had a minigame. The only real difference between John Phillips' C64 classic and the 464 version is that the port is a bit slower, but that doesn't affect the challenge of ascending its stages.

■ As with Raffaele Cecco's Spectrum-to-464 *Exolon* port, the 464 conversion of *Stormlord* is far more colourful than the original. In gameplay terms, both versions are nigh-identical, although the 464 port is a little easier due to its opponents being slightly less aggressive. That aside, the fairy rescuing mission of the original game remains intact, as does its object- and obstacle-based puzzles, and its fairy-themed shoot-'em-up minigame.

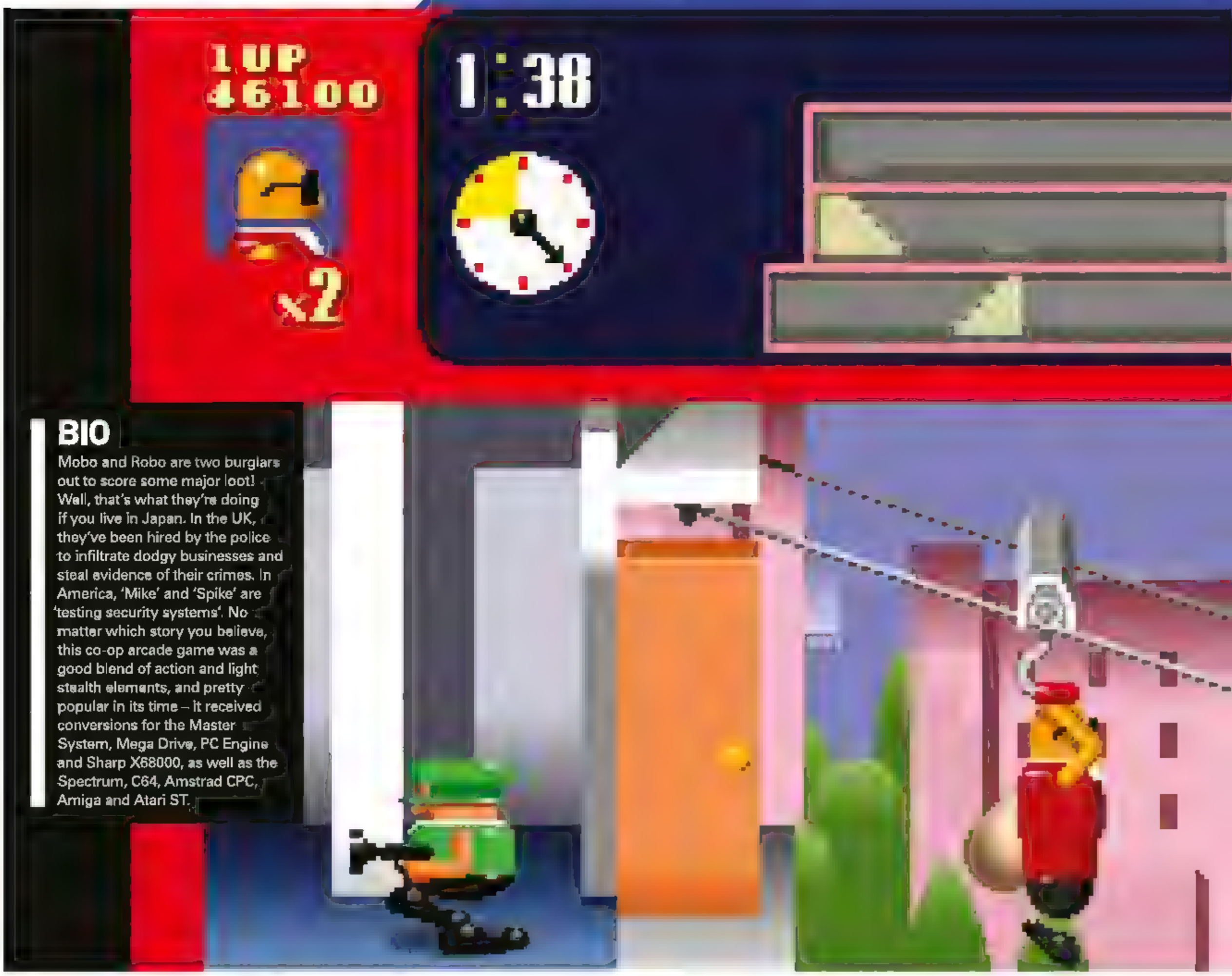
CLASSIC MOMENTS

Bonanza Bros

» **PLATFORM:** ARCADE » **RELEASED:** 1990 » **DEVELOPER:** SEGA

The first level of Bonanza Bros is pretty straightforward, all things considered. A few pesky shield guards are scattered about here and there, but it's not hard to escape the bank with some treasures and make it back to your getaway blimp. When you think about it, that's some audacity – who even uses a blimp to escape the scene of a crime?

The mansion in the second stage though, that one's a bit trickier. Not only are there a lot of shield guards, there's one particularly big chap who loves lobbing bombs at you and can absorb a lot of gunfire. Thankfully, you've scoped out the building beforehand and you know that the mansion's owner is a bit of an eccentric, who has installed a zip line between parts of the building. So you take a daring dash up one side of the building, alerting guards left and right. Why? Because it's much more fun when you leap onto the handle and hurtle towards the other side, leaving fuming security staff to turn and try the stairs. Sayonara, suckers! ★



BIO

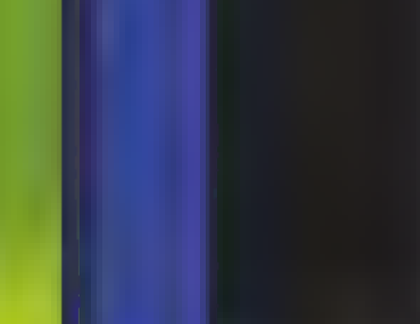
Mobo and Robo are two burglars out to score some major loot! Well, that's what they're doing if you live in Japan. In the UK, they've been hired by the police to infiltrate dodgy businesses and steal evidence of their crimes. In America, 'Mike' and 'Spike' are 'testing security systems'. No matter which story you believe, this co-op arcade game was a good blend of action and light stealth elements, and pretty popular in its time – it received conversions for the Master System, Mega Drive, PC Engine and Sharp X68000, as well as the Spectrum, C64, Amstrad CPC, Amiga and Atari ST.

MORE CLASSIC BONANZA BROS MOMENTS

Slip-up

Even the best laid plans can come unstuck due to a banana peel moment, and in Bonanza Bros the banana peel is quite literal. All it takes is one carelessly discarded bit of fruit waste and your character will take a tumble, with the resulting crash alerting any nearby guards. Better hope you survive!

Stand-off



Uh oh... you've been spotted, and now the shielded guard knows that you're there. So what do you both do? Run for cover. It's the natural response and a cool visual, but it usually serves to help the guard, as the security team has a considerable manpower advantage over our plucky intruders.

Shadow Skills

The searchlights are out when you reach the game's full screen bonus stage, but Mobo and Robo can avoid them and stay in the shadows if you're good enough. Grabbing bags of cash will award 1,000 points each, and you'll get a 10,000 bonus if you get them all within the relatively short time limit.

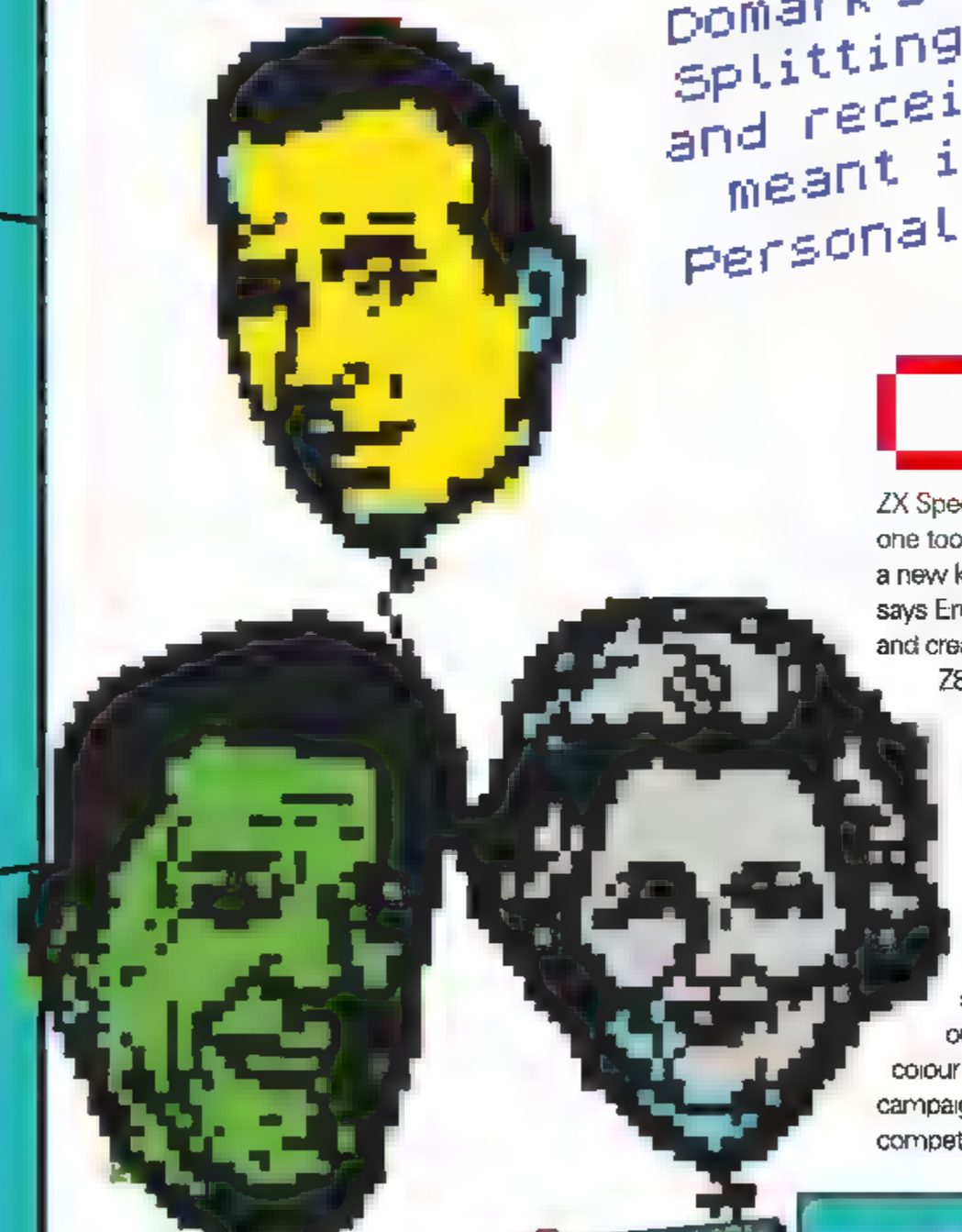
Splat!

The security officers are the nominal good guys, but the good guys aren't too smart. If you needed any proof of that, check out this bumbling buffoon of a shield guard. He opens up the door with such force that it splats his colleague against the wall and incapacitates him, doing part of our job for us.

The Making of Spit Splitting Images

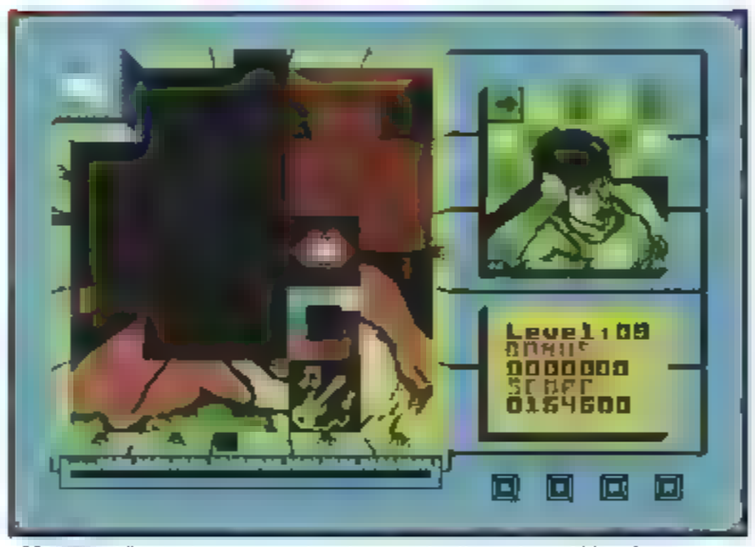
Domark's impressive sliding-tile puzzle game Splitting Images featured many famous faces and received great reviews, but legal action meant it needed to change names to split personalities before it reached the shelves

Words by Andrew Fisher



Our story starts in the Netherlands, with an 18 year-old Ernest Peske. "In the early Eighties my older brother Ruud bought his first home computer, a Sinclair ZX Spectrum. Wow, we loved it! Soon [after] I bought one too. We customised both Spectrums by ordering a new keyboard and a decent joystick from the UK," says Ernest. "I started experimenting, drawing pictures and creating graphics. Ruud started programming the Z80 assembler. This resulted in our first Spectrum game, a sliding puzzle, followed by our next puzzle game The Evolution – basically a 2D version of a Rubik's Cube. These games were almost published in the Netherlands under the Microcomputer Club Netherlands label.

"The poor packaging and bad marketing of this Dutch publisher was not what we were looking for. Games in the UK were booming, so we tried to publish The Evolution there ourselves. But we didn't have the money for full-colour packaging, decent marketing or an advertising campaign. We felt the game was not good enough to compete – still, it got three out of five stars in Computer Weekly. Finally, we had the idea of creating a puzzle game. The basic version of Splitting Images was born."

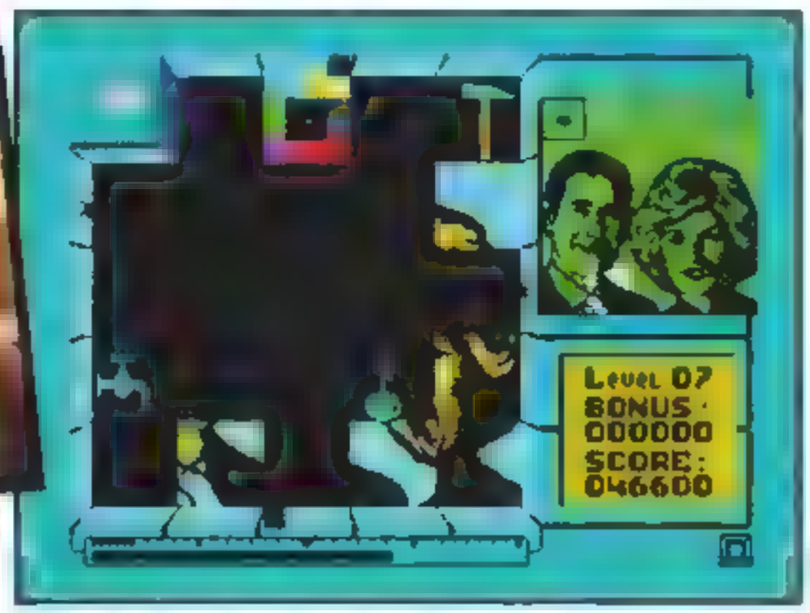


« [C64,] it's still going to take some time to assemble this picture of Mick Jagger. You better get a move on.

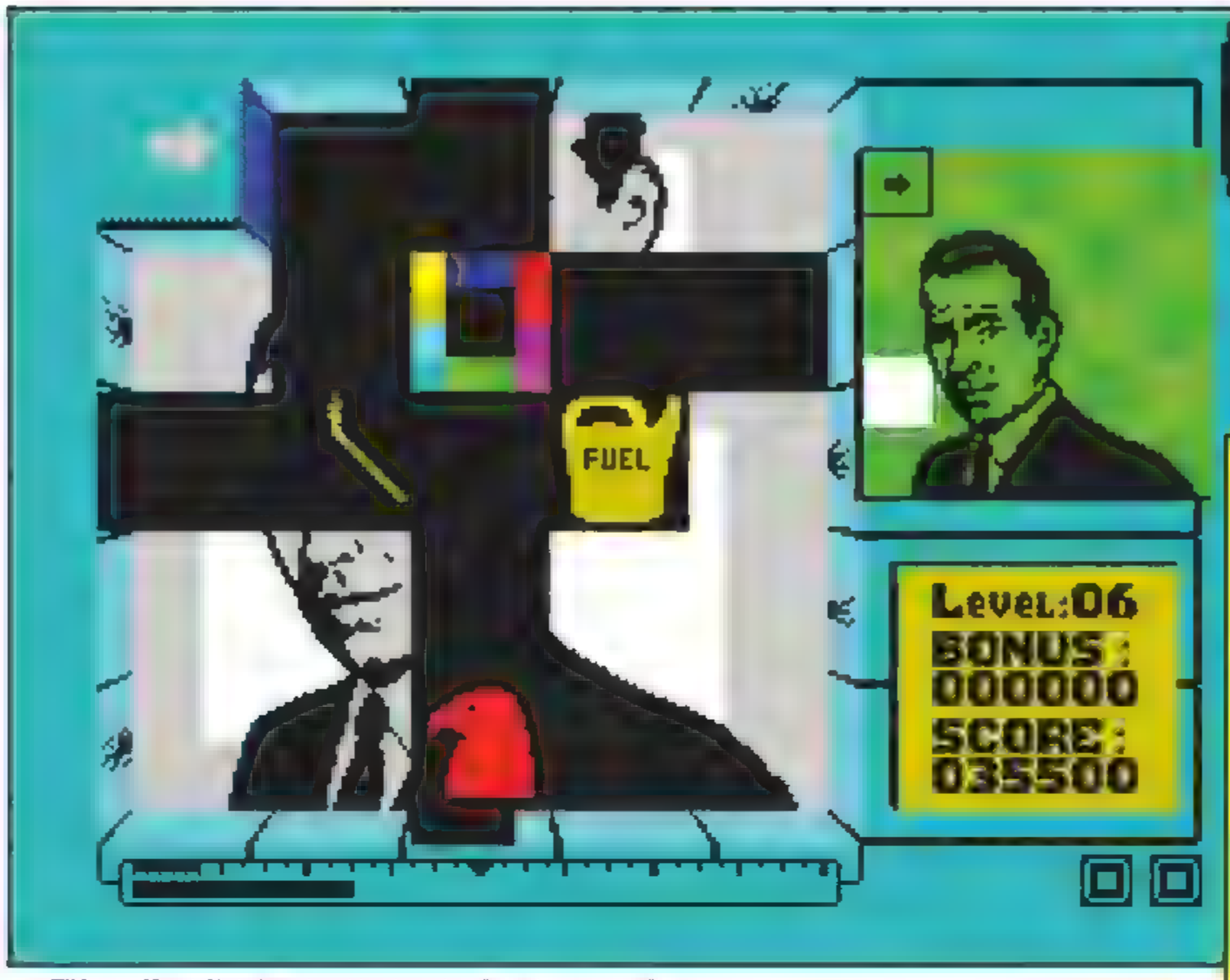
Ernest and Ruud formed Enleware in 1985, signing up with the Chamber Of Commerce. Ernest now needed to draw the necessary pictures. "I've never revealed the whole process in any interview in the past!" he admits. "I made my own drawing program for the ZX Spectrum in BASIC. This allowed me to draw dots and lines on the screen and even enlarge the image by a factor of two.

"I started by carefully selecting a nice picture or photo with enough contrast. This was very critical, I had to be sure that the final result would look nice; a Spectrum picture basically features black and white or little colour and low resolution. I placed a piece of transparent film on the original. By using a waterproof black marker I could make a copy. Then I placed this transparent film on the screen (black and white TV or monitor) and used my own drawing software to make a replica. Usually I did this by scanning each line of the whole image, from left to right. A lot of work was involved finishing a picture, but I felt I did get the best possible result working this way." To add colour he switched to a colour TV. "Usually I did this by using background colour behind the black ink. This was quite a challenge, because of the colour limitations."

« Ernest Peske was 18 when he had his first experience with a ZX Spectrum.



» ZX Spectrum. Move the gap into the bomb to defuse it – quickly!



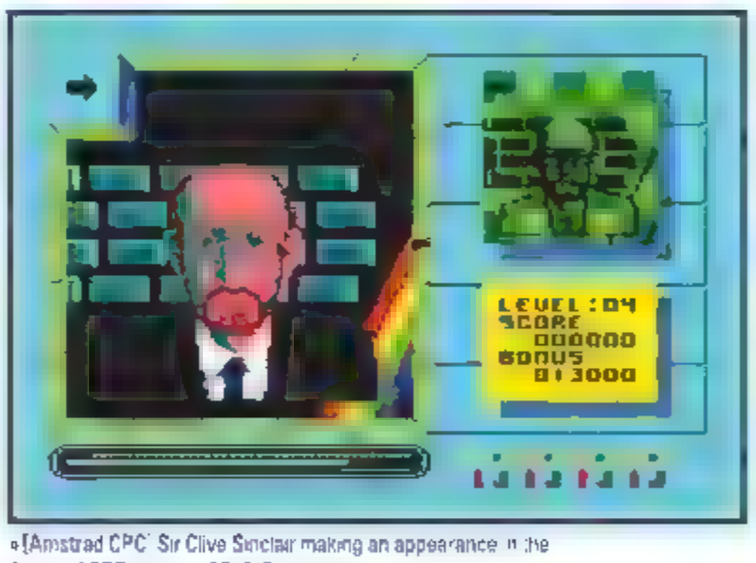
▪ [ZX Spectrum] Do not slide the fuel and match together as they will explode, costing you a life

The aim of the game was to slide pieces to recreate an image (four rows of five pieces). Pieces enter from the puzzle box in the top-left and can be slid out of the opening and closing doors. A smaller complete image is shown in the top-right, the position for the current piece highlighted. Sparks on the walls push away pieces. After the first couple of levels, unsupported pieces will be pushed back when hit.

How were the pictures chosen? "Originally it featured some different pictures," explains Ernest. "But Domark wanted to include political personalities. Because of memory limitations, we had to choose ten. The political personalities were chosen by Domark, the others by us."

Other objects enter the grid. Bombs explode after a few seconds, so they must be thrown out or defused by the tap. If the fuel and match meet, they explode and cost the player a life. There are three lives to start, with an extra life for finishing a puzzle. Smashing two diamonds together adds a minute to the timer (time remaining is added to the bonus score). The bullet and gun combo doubles the bonus. Each picture has at least one pair of bonus objects to match. Mick Jagger has a guitar and the Rolling Stones' lips. What inspired the bonuses? "We wanted some arcade action within the game, like a bomb and some humour. We chose some of the 'political objects' with Domark," says Ernest.

The game took six months to make. Ernest recalls, "We contacted five publishers by sending them a copy. Domark was very keen to publish and also came up with the name Spitting Images. I remember, they actually wanted a licence from the satirical TV puppet show Spitting Image." A Crash interview with Emieware by John Minson (from issue 31) included

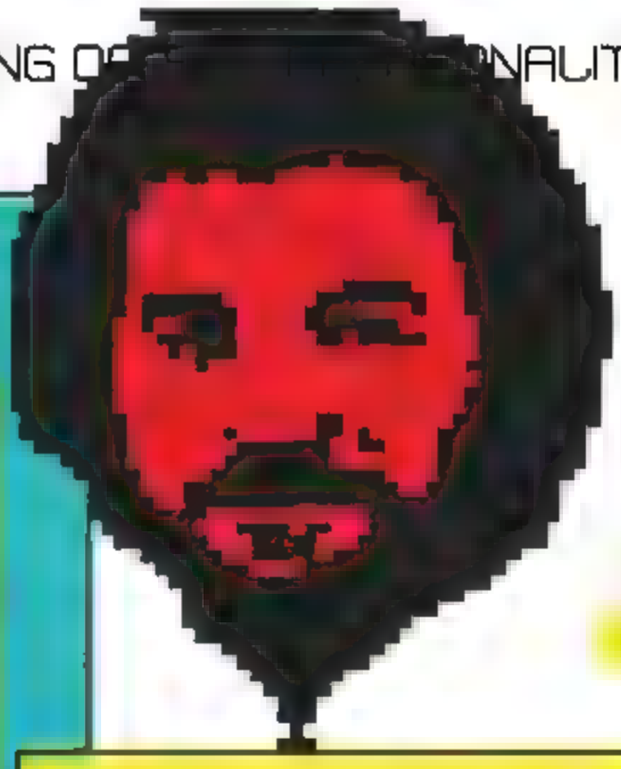


▪ [Amstrad CPC] Sir Clive Sinclair making an appearance in the Amstrad CPC version of Split Personalities

a phone call from Mark Strachan explaining that the name had changed, after Central TV threatened legal action. "Since Domark couldn't get the licence, we all expected lawsuits. So, a change of name was more or less a matter of time. Domark did welcome the extra publicity." Was Ernest aware of the TV programme? "Yes, I absolutely loved it!" he smiles.

C64 programmer Mark Greenshields loved Spitting Image, too. "Who didn't? It was very funny and a must watch," he says. But how did he get the job converting the Emieware game? "I was working at Domark full-time as a programmer, creating the C64 version of Live And Let Die. Mark Strachan and Dominic Wheatley (Domark's founders) talked to me and I agreed I could code the game in the evening and weekends, whilst still doing Live And Let Die."

Mark's deadline was about to change. "I agreed to do the game in three months. Mark Strachan came ▶



SPITTING IMAGE – THE GAME

Carleton Handley on the official game based on the TV series

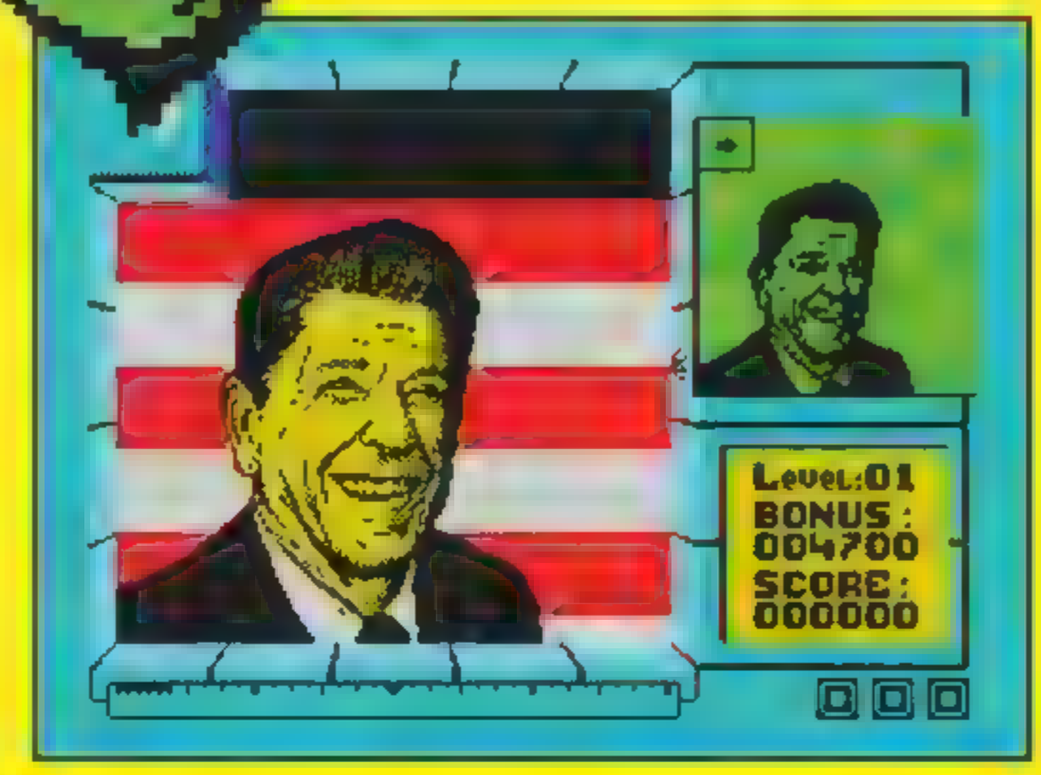
Having run into problems with *Split Personalities*, Domark tried once again with an officially licensed *Spitting Image* game in 1988. Development was handled by Walking Circles, with the C64 version by Carleton Handley. Carleton says, "We'd already done *The Living Daylights* for Domark, so they approached us to do the 8-bit versions of *Spitting Image*. We had four programmers at Walking Circles and I was the only C64 one." The intro's story set up a *Street Fighter*-style beat-'em-up between six world leaders (Pope John Paul II, Maggie Thatcher, Ronnie Reagan, Mikhail Gorbachev, FW Botha and Ayatollah Khomeini), with the champ on taking on a mysterious seventh character (in a dark mud-pit).

Sadly the result was poor, with reviewers criticising the lack of moves and below-par graphics. Carleton says, "I bought *Zzap!* every month, we even went to their offices in Ludlow to demo a build to the reviewers. They were probably fair enough in their opinions of it. I'd have certainly been upset had I bought it. The gameplay is far too frantic. The characters skitter about like insects and the energy bars made it a war of attrition to see who could reduce the opponent's bar the quickest. It was more akin to a joystick waggler."

That did not stop a PR blitz by Domark, which included a competition in Newsfield's magazines, by writing the script for a *Spitting Image* sketch, three lucky winners got to visit Peter Fluck and Roger Law's puppet factory and have themselves immortalised in puppet form.

CONVERSION CAPERS

Which version made Ronald Regan look the best?

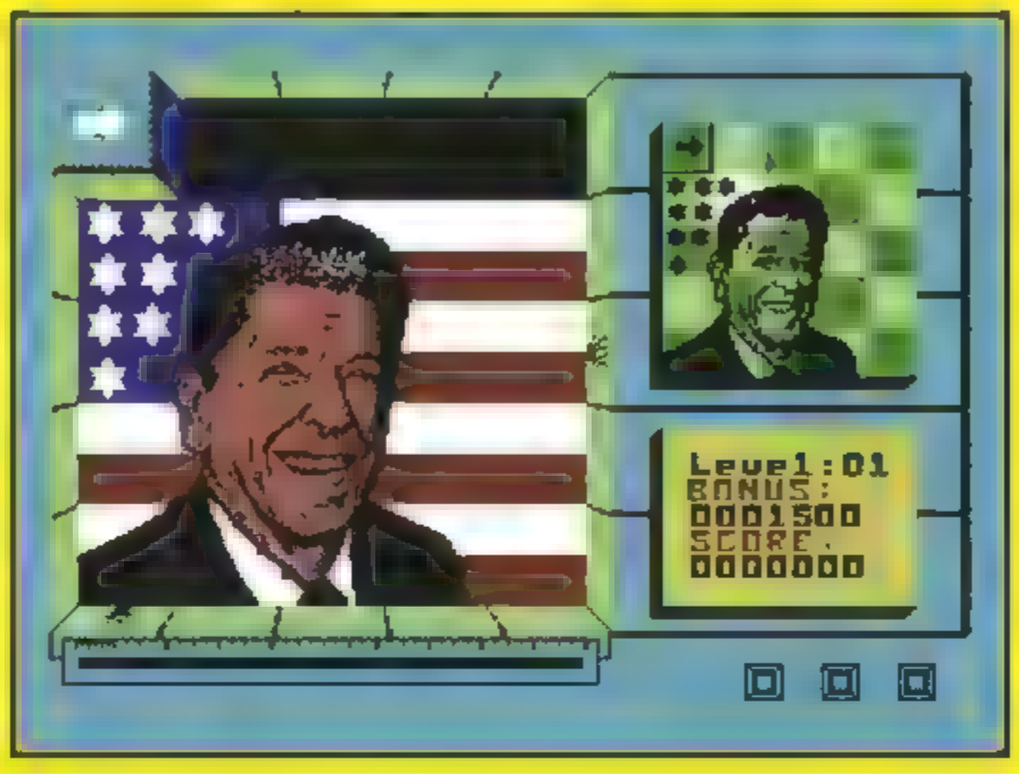


ZX SPECTRUM

■ The original version, this is a fine Spectrum title and a challenging puzzle game. The portraits are superbly drawn with minimal colour clash and the sounds work well. Time limits are tight but manageable, with a very good difficulty curve. The bombs do explode very fast in comparison to the other formats, though, and the keys cannot be redefined.

C64

■ This makes good use of the C64's high-resolution mode, with high-quality portraits as good as the original. The bombs take slightly longer to detonate, which makes things a little easier. Excellent David Whittaker jingles are a nice bonus, and this version lets you redefine the keys. Overall it plays as well as the Spectrum original and is very fun to play.



» ZX Spectrum, it's extremely satisfying to finally assemble a complete picture. This is Neil Kelnock.

▶ in after a meeting with Boots (who in those days sold a fair bit of software) and said, 'Great news, got a deal for the game, and it needs to be with them on the 21st' (I might be wrong on the actual day as it was 32 years ago) I had been working for about a week on the game, and said no problem (as it was originally due on the 28th). Then the bombshell dropped. It was this month or three weeks from that day. I had three months to go on the game! I said I would do my best. I basically lived in the office 24/7 and was often found asleep on the keyboard. But the game got done and did very well."

Artist Richard Naylor created the caricatures. "He took photos and copied them pixel for pixel if I recall correctly. He might have done the art on an Atari ST but I could be wrong. It was all hand-drawn though," says Mark. The game used high-resolution bitmap mode rather than multicolour mode. "It was due to the time we had and the Spectrum art that was already available. The C64 multicolour mode had limits with horizontal resolution so we decided that visual quality was more important than colours.

"The biggest challenge was squeezing three months into three weeks, and fitting all source code, art, running code, assembler and more into a 64K machine at the same time." Was Mark aware of the name controversy? "Yes, a legal threat was sent by the TV show at the very last minute. The game had to be changed in a day or two. It was a shame as the old name was perfect, and the cover was great."

David Whittaker took on duties to create the music, as Mark recalls. "He had done the music for Eureka! and we talked to him. We worked with him to get the music right. It was perfect for the game. It brought it to life." David was also credited with the Spectrum version, but Ernest remembers it differently. "He didn't for the original Spectrum version. However, he did the music for Amstrad and Commodore. This was Domark's choice," says Ernest.

Mark just made his deadline. "By four hours," he explains. "I was utterly exhausted and took a week off. I went home to Glasgow (I lived and worked in London) and went out with friends. I thought I was absolutely fine until I fell asleep on the A74 dual carriageway at 80mph (I was more tired than I thought). I could have

> **"A legal threat was sent by the TV show at the very last minute. The game had to be changed in a day or two"**
>
> Mark Greenshields

IN THE KNOW

» **PUBLISHER:** DOMARK

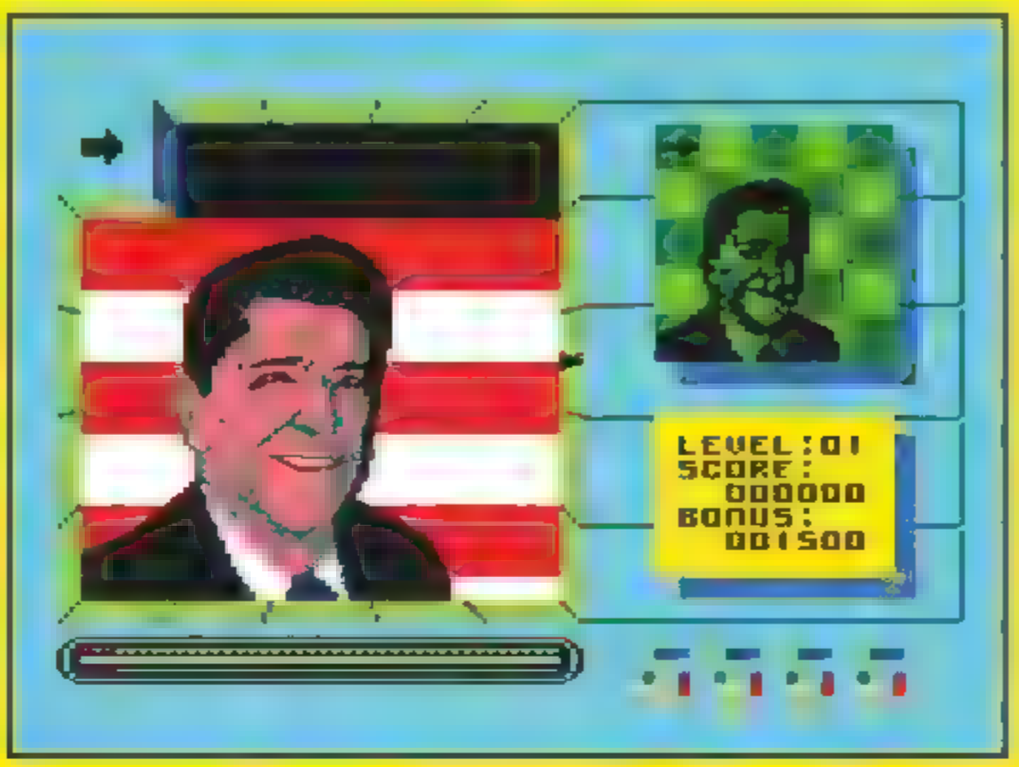
» **DEVELOPER:** ERNIEWARE (ZX SPECTRUM), MARK GREENSHIELDS (C64)

» **RELEASED:** 1986 (PLUS/4 1987)

» **PLATFORM:** AMSTRAD CPC, C64, PLUS/4, ZX SPECTRUM

» **GENRE:** PUZZLE

» Mark Greenshields coded the C64 version of Split Personalities while working on Live And Let Die.

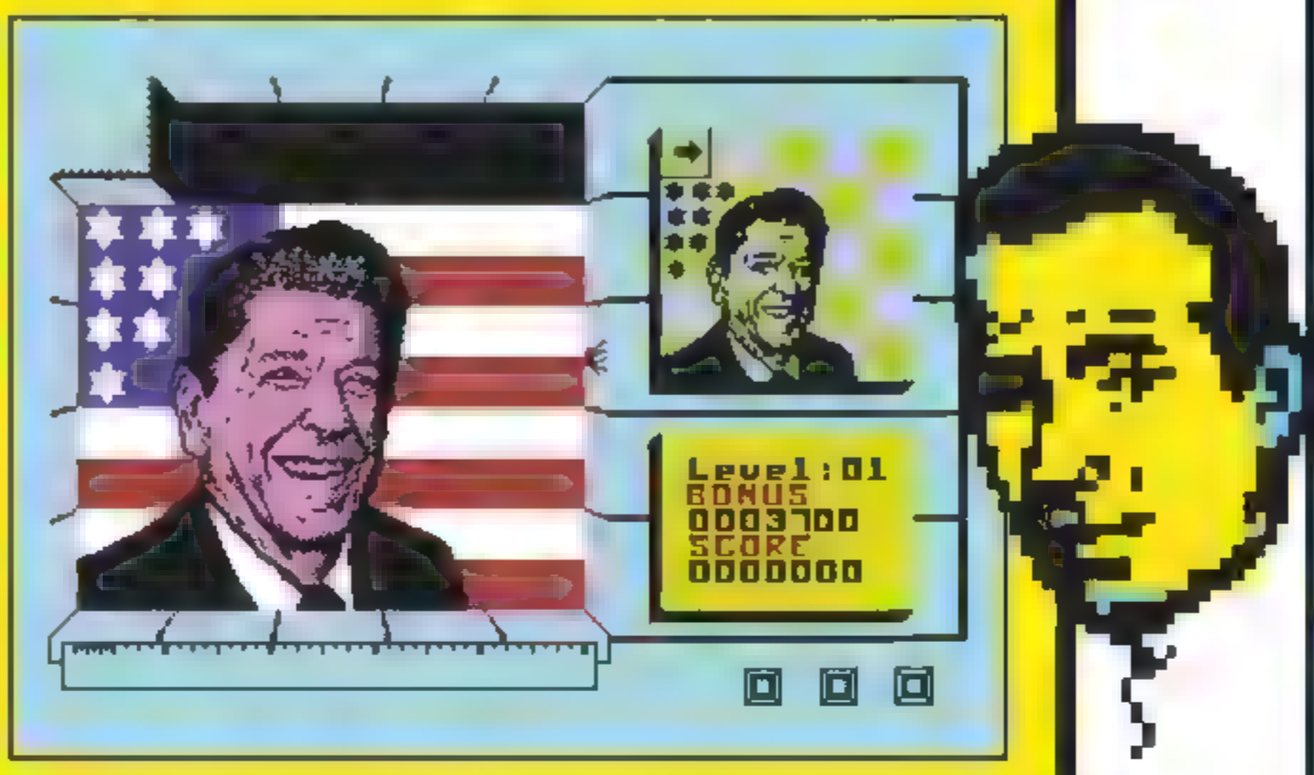


AMSTRAD CPC

■ The CPC conversion by Darren and Jason Pegg used multicolour mode, redrawing the portraits with added colour – the end result is very impressive. Sound is what lets this version down, with very raucous effects and simple jingles. The option to redefine the keyboard controls is welcome. Otherwise it plays just like the excellent Spectrum version.

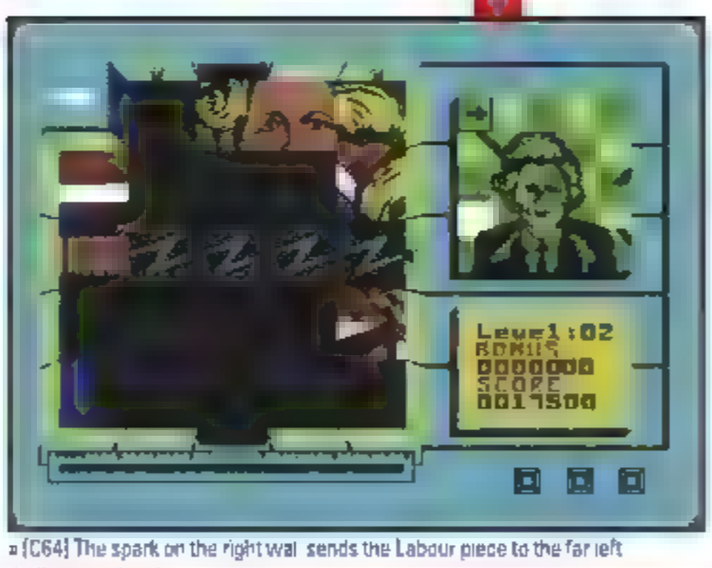
COMMODORE PLUS/4

■ Released a year after the others, this is heavily based on Mark Greenshields' C64 conversion but is not widely remembered. The larger colour palette of the Plus/4 helps, particularly with skin colour tones, but as with the Amstrad version it is the sound that is poor. The highlight on the mini picture is also harder to follow, making this version tougher.

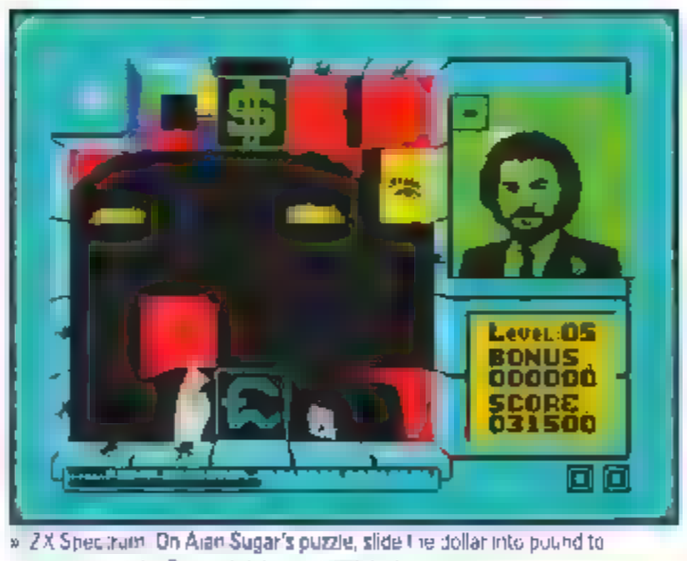


died, but I was lucky – I burst a tyre and otherwise was perfectly fine – I do not drive tired anymore."

Reviewers loved the game – awarding a Zzap!64 Sizzler, C&VG Hit, Crash Smash, Your Sinclair Megagame, and Popular Computing Weekly Pick Of The Week. ACE included it in its Greatest Games Of All Time list (with John Minson heaping praise on the game again). Mark was very pleased. "It is very gratifying to get great reviews when you have worked so hard and believe you made a great game. I was very happy and still am." Ernest was happy too. "I remember in July 1986, we heard about our first Crash Smash on the car telephone (of Mark Strachan) while we were driven around London doing a promotional tour."



» [C64] The spark on the right wall sends the Labour piece to the far left – that's a nice touch.



» ZX Spectrum. On Alan Sugar's puzzle, slide the dollar into pound to earn extra points. Congratulations, you did a business.

Ernest was not aware, but there were three C64 versions (UK, US and German) with different pictures. Mark did extra work, changing the order of the pictures (Ronald Reagan was first in the US edition) and adding a new one (West German Chancellor Helmut Kohl). Mark was also responsible for the little-known Plus/4 version. "Yes it was my code I wrote it (unless my memory fails me)." Ernest played all the conversions and says, "I always felt the original Spectrum version was the best, featuring lots of attention to detail, getting the maximum out of the computer."

When it came to payments, Ernest says, "We gave Domark the licence for our game for a fixed time period. We chose a combination of advance and royalties. We also got paid royalties for the conversions." Mark was paid differently. "Fixed fee and nothing more. In those days fixed fees were more common. Shame."

Is there anything the team would change? Ernest says, "Perhaps, launching the game about two years earlier. That way we could have been developing more games. We only published two more games after Split Personalities, Fast & Furious and Thunderceptor. At the end of the Eighties home computer games weren't booming anymore... and we quit making computer games." Mark sighs, "There was a bug I would have liked to fix. But no, I think the game played well so I was happy with it."

Split Personalities' design lends itself to an iOS or Android app – does Ernest agree? "Absolutely! Moving the pieces around on a smartphone/tablet would enhance the playability. I would really love to play it!" Ernest is back making games. "I designed a card game last year. It's not published, but the publisher encourages me to design another one in the near future." Mark, now in Florida running Firebrand Games, agrees. "I had one of my teams create it in 2011, but they did a poor job. The game was released as Cutesy (for kids) but it did not play right. I do know how to make this work really well, so maybe it will happen one day."

ULTIMATE GUIDE:

INTERNATIONAL SUPERSTAR SOCCER PRO

We often look back fondly on famous sporting events that changed the landscape of the sport in question, so why don't we do that with sport games so much? Let's address that by revisiting Konami's 3D football revolution

Words by Luke Albigés

» [PlayStation] The ability to pan and zoom the camera while rewinding and rewatching a goal always proves great for gloating.

» [PlayStation] The radar uses blue and red markers for home and away players respectively, which is fine until teams rock up in the opposite colours

People often mistakenly assume that Three Lions was originally recorded in support of the England World Cup 1996 squad. In actual fact, The Lightning Seeds' nursery rhyme for louts was actually celebrating the impending arrival of the Winning Eleven videogame series on our shores for the first time, and in 1997 football did indeed come home as promised.

Konami was no stranger to arcade style football games at this time, and the International Superstar Soccer brand itself had been a hit on the SNES during the previous few years, to the point of being regarded by some as the best 16-bit soccer game. ISS and its Deluxe follow-up used a similar isometric viewpoint to the early FIFA games and felt more technically impressive than the aging Sensible Soccer and its miniature kickmen, but with the polygon revolution on the horizon, a fancy viewpoint like that was only a selling point for so long. In fact, after the 3D takeover that followed, the simpler games like Sensi actually feel like they have aged a lot better. ISS Pro wasn't technically the series' first foray in three dimensions, as it was actually an update of early PlayStation title Goal Storm which, despite the popularity of the sport in Europe, missed out on a PAL release. This led to a situation which perhaps helped ISS Pro's fortunes, namely an influx of bad-to-middling footy games in the PlayStation's first year. The likes of Actua Soccer, Adidas Power Soccer, Striker '96 and all the rest helped fill the void in the short term but their shortcomings became crystal clear the moment the 3D novelty wore off, and footy fans were forced to settle for FIFA's polygonal debut as the closest thing to a good soccer game at the time.

A common complaint about a lot of early 3D football games was that it was often too easy to score, usually once an easily replicated trick was found. This was an issue which would come to be synonymous with the first wave of 3D FIFA games, which seemed to follow the everyone gets a medal approach and could reward sensational finishes for so much as thinking about the shoot button, resulting in ludicrous double-

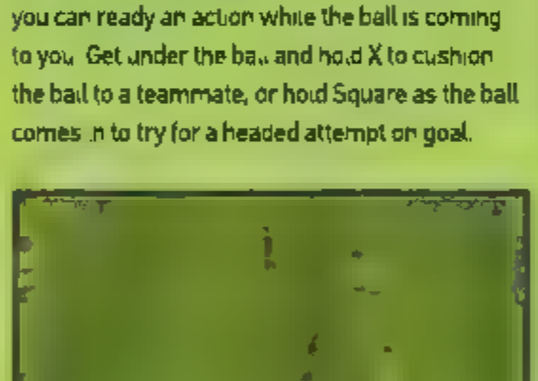
» [PlayStation] Even in a digital world and going by a pseudonym, Darren Anderton still can't be counted on to be match fit. Sigh.

digit scores. But just like not all heroes wear capes, not all heroes even know their own names – our saviour from digital footballing mediocrity came with a different title for every territory (ISS Pro in Europe, Winning Eleven '97 in Japan, and Goal Storm '97 in the US) and a roster packed with completely made-up player names. But what it lacked in consistency and official branding, ISS Pro more than made up for on the pitch – something that would go on to be a defining characteristic of the games that followed in the series. We'll come to those later, though, as it's important we talk a bit about exactly why ISS Pro served as a turning point, although much of that discussion can again be applied to the series as a broader entity as well.

The limitations of older hardware made it difficult to emulate the absurd amount of variables involved in 22 guys hoofing a ball around, hence why so many early footy games were little more than pinball games where the bumpers wore kits. While FIFA's approach to bringing in a feel of realism was just to slow things down, ISS Pro would arrive with a different manifesto – to recreate the fluidity of the beautiful game even if it couldn't nail every last nuance. The result was a game that played like a dream, not least thanks to the fact that we only had low-division

FEVER PITCH

How to ISS like a pro



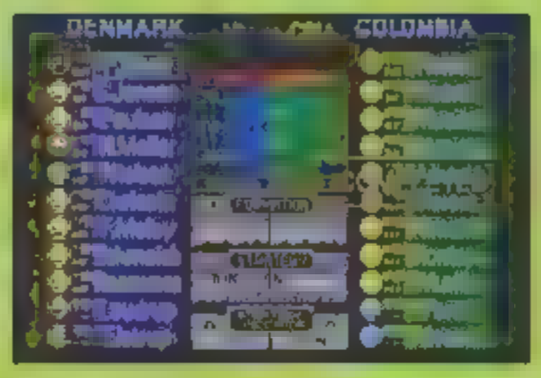
■ That minimap at the bottom of the screen is there for a reason. It's useful for picking out players for speculative long balls and not giving away possession with forward passes to nobody, so try to keep one eye on it at all times.

■ Volleys need to be timed, but for anything else you can ready an action while the ball is coming to you. Get under the ball and hold X to cushion the ball to a teammate, or hold Square as the ball comes in to try for a headed attempt on goal.

■ While you're holding down R1 to run faster, you can't change direction and will knock the ball ahead of yourself, making it easier to pick up by a well-placed defender. Only use this when you're in good space for a run.

■ It's best to play a move or two ahead: press L1 to switch to a different player, then let the CPU deal with an opposing run while you move to block their best passing options or get another shirt between them and the goal.

■ Check the condition of your players before a match. This is completely random and has a huge impact on their stats, so a super striker with that sad face icon is likely to perform worse than a bench-warmer who is in the form of their life.



■ While you can try to get the one-two pass to work, pulling it off is rare so we'd advise sticking to through balls. Konami seemed to notice this weakness, and the move was overly improved in later games where it is dangerously effective.

■ If you want to give yourself the best chance at a win, pick a team that you know has the players for the job. Warning: given the lack of in-game stats, this will actually require a working knowledge of mid-Nineties international football.

■ You should use every weapon in your arsenal to chalk up a win against the player next to you in multiplayer. Making them sit through your replays is a great way to get in their heads.

COMMENTATOR'S CURSE

A selection of the announcer's best out-of-touch lines

"IT'S YELLOW... THAT'S AN EARLY BATH!"

Is it wrong to expect the commentator to know that a yellow card is just a caution? No? Good.

"WHO'LL TAKE THIS KICK, I WONDER?"

Usually heard moments after a free kick has been taken by a player whose name is in the corner of the screen.

"THAT BOY'S GOT A STEEL SKULL!"

For someone whose job it is to watch and talk about football this guy sure gets a kick out of basic headers.

"HE'LL BURY THAT IN THE NET!"

He yells as the ball soars wide of the goal, and into the stands. Are we even watching the same game?

"WELL, THAT WAS A STRANGE DECISION!"

Ahhh, nothing like a passive-aggresive jab at the officials. It's hardly professional, although...

"WHAT A PRIME EXAMPLE OF POOR OFFICIALS..."

Never mind, he just outright states that they're rubbish sometimes as well.

"30 SECONDS FROM KICK-OFF..."

Like the other time-based soundbites, this can seemingly play at any time, so unlikely to be heard when it's actually accurate.

"NOW I'D PAY TO WATCH FOOTBALL LIKE THAT!"

Way to rub your privileged position in the faces of the paying punters, mate.

» [PlayStation] There are several different angles to choose from, including this vertical option which just feels wrong, especially in two-player games

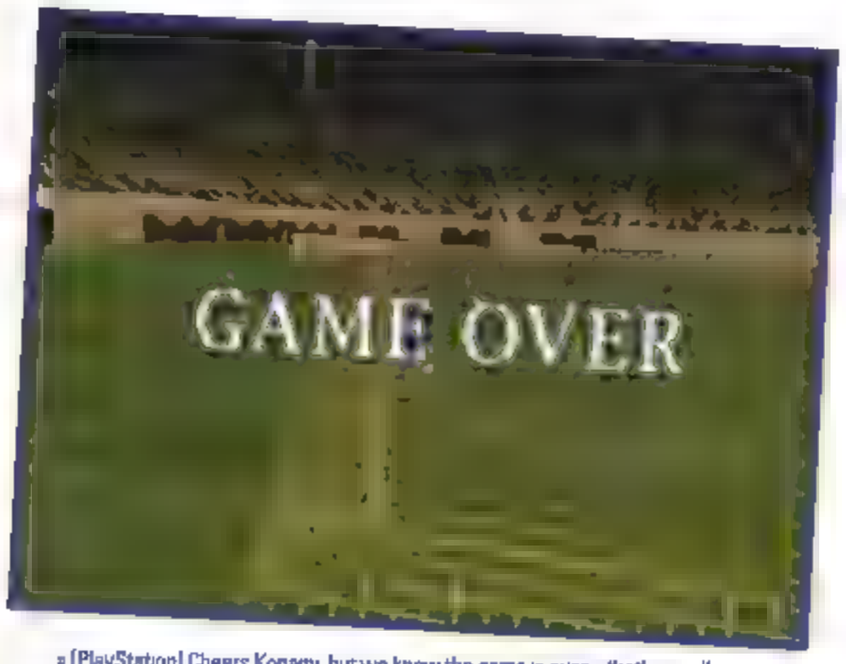
» [PlayStation] Goalies are generally AI-controlled, although you do get to take control to boot the ball upfield or roll it out to a defender.

competition to compare it to. All the same, you can still feel the flow in ISS Pro to this day, with great player movement on and off the ball and some fantastic animation to boot. The controls reflect this as well – at least once you get to grips with some of the more complex options available. Options can be locked in early by holding buttons as the ball comes to a player, enabling silky-smooth passing play and quick strikes on goal to catch defenders napping. While a far cry from the one and two-button control systems many of us grew up with, ISS Pro's scheme still allows players to get by with only a handful of buttons, while at the same time presenting more advanced options and combinations that allowed for a surprising amount of depth and potential in skilled hands.

Despite the more lifelike flow on the pitch, though, ISS still shows its arcade heritage in every other aspect. Bright and colourful visuals make the game pop like something you might see on a coin-op cabinet, menus are bold and clean but offer limited options, and even little things like player fitness are measured

"BRIGHT AND COLOURFUL VISUALS MAKE THE GAME POP"

in gamey ways that you shouldn't expect to see on Match Of The Day any time soon – smiley faces on the team screen denote in-form players while pale, sad emojis sit next to players who are off their game. The commentary is perhaps the best example of how this game straddles realism and fantasy, a frankly painful attempt to replicate broadcast style play-by-play that swings from tired cliché and stating the obvious (or just being flat out wrong), to the kind of overexcited snippets you'd expect to hear bellowing from an arcade game. It was still rough around the edges, but ISS Pro was comfortably the best option around at the time for football fans and Konami wasn't about to throw away this early lead. It was time to evolve.



» [PlayStation] Cheers Konami, but we know the game is over – that's usually what happens after 90 minutes have been played.

While EA leaned more and more heavily on its official licence to wow fans with lifelike players and an increasingly impressive broadcast presentation without ever really fixing some of the core issues with its gameplay, a pair of ISS Pro Evolution games in the PlayStation's twilight years took the core tenets of ISS Pro to the next level as the name suggests. Tighter and deeper control systems, even more lifelike movement, and the addition of the superb Master League mode – a hybrid of on-pitch action and behind-the-scenes management as you acquire new talent and build a super squad over the course of multiple series – were

» PlayStation. The sport was different back in 1997. Remember when goalies were allowed to perform one Psycho Crusher per match? Good times

offset by spoonerised player names to get around the lack of a licence. FIFA was establishing itself as the go-to game for those wanting an authentic recreation of Saturday afternoon TV matches, while ISS continued to be the purists choice for anyone who just wanted the best-playing digital version of the sport.

And those principles have been in place to prove the differentiating factors between the two franchises ever since, even with Konami ditching this ISS prefix as it headed onto PS2 to create the now-legendary Pro Evolution Soccer brand (the undisputed king of the pitch for that entire generation) and then later rebranding again to take up just the PES moniker fans had been using for years. Pro Evo 3 using a referee on the cover wasn't just some weird happenstance. It was the perfect symbol for what the series had become – the one voice that mattered in football games at the time. Without ISS Pro sowing the seeds of greatness, it would never have reached that point, so this plucky underdog of a football game will always have a place in our hearts ★

LATER SEASONS

How the series has fared over the years

ISS PRO EVOLUTION

PLAYSTATION, 1999

■ Improvements across the board made for a must-own PlayStation game for football fans, but it was the Master League mode that stole the show. Every match matters when success will help you grow and improve your squad in a mode that runs for season after season, and it never gets dull.

INTERNATIONAL SUPERSTAR SOCCER

PS2, 2000

■ Konami hoofed the ball over the bar with this one, a PS2 launch title that went back to the old ways to deliver arcade-style action but without a lot of the depth or nuance of the late PlayStation games. A step backwards, as the title suggests.

PRO EVOLUTION SOCCER

PS2, 2001

■ This is more like it. Picking up where *ISS Pro Evolution 2* left off – this series is second only to *Kingdom Hearts* in terms of its terrible naming conventions – this set an early benchmark for how football games could and should play on the new hardware.

PRO EVOLUTION SOCCER 6

VARIOUS, 2006

■ A few experimental ideas in previous releases (spoilers: handballs don't work in videogames) and the realistic presentation of rival *FIFA* marked this as the end of an era for *PES*. This was still good, but the series began to stumble shortly after.

PES 2019

VARIOUS, 2018

■ Fast forward a decade and *PES* is back in the driving seat after a slew of up-and-down seasons. *FIFA* is still the commercial king thanks to its top-notch presentation, but *PES* has pulled its boots up again and still plays the better game of footy today.

The Making Of The Longest Journey

Designer and writer Ragnar Tørnquist acts as our guide through the dual realties navigated by April Ryan in a point-and-click classic that contrasts a bleak science fiction future with a fantasy world full of magic

Words by Paul Walker-Emig

The Longest Journey is something of an aberration. Initially released in Norway during 1999, in the wake of declarations about the death of the adventure genre following Grim Fandango's commercial failure and the closure of Sierra, and featuring a female protagonist, which many publishers still sadly view as a risky business decision, received wisdom dictated that it should have failed. It did not. Critically acclaimed and a big commercial hit for developer Funcom, TLJ gave us an early hint that the 'adventure games are dead' narrative was badly flawed as it cemented its place in the canon of adventure game greats.

As heartening as it may have been to see a game like TLJ buck the trend when it came to the perceived health of the adventure genre, you might wonder why a developer would take the risk. The answer, producer, designer and writer, Ragnar Tørnquist tells us, is that the team wasn't really thinking about the context in which it would be making the game.

IN THE KNOW

- **PUBLISHER:** Empire Interactive, Tri Synergy
- **DEVELOPER:** Funcom
- **RELEASED:** 1999
- **PLATFORM:** PC
- **GENRE:** Point-and-click

» [PC] April Ryan discovers she is a 'shifter', meaning she has the ability to travel between her own world, Stark and Arcadia.

» [PC] Much of [illegible] is about advancing the story or solve puzzles, but to add a sense of atmosphere and create believable relationships with other characters.

» [PC] The neighbourhood of Venice provides a nice contrast to the cyberpunk inspired sections of Newport City.

"It was a long time ago," Ragnar remembers. "There was at least the internet, but at that time the dissemination of information was completely different and we were also in a bubble here in Norway. We knew there was a world outside ours, but for the most part we were sitting in our snowed-in office building and doing our own thing. I don't think we really had a lot of insight into the market in general and none of that informed us in any way. At least not me and the team.

"Our goal was to make a game that was inspired by the point-and-click adventure games that I loved. Specifically, the first Gabriel Knight game and Day Of The Tentacle. We didn't know how much they sold, but we wanted to do something similar and we thought that if we did a really good job, it would be appealing to people. It was as simple as that."

Ragnar explains that this context, working in an industry that didn't have long-term strategies and strong marketing oversight, was vital to the creative process that bore The Longest Journey. "There is something liberating about that. Instead of being driven by SteamSpy and market analysis and all these things... which are good tools, but they can prevent developers from doing something a little more dangerous and risky that can lead to something amazing. The Longest Journey wouldn't have happened if we'd had a marketing department or a management team that used numbers and stats to decide what games are going to be made," he continues. "It was never a question of making it more commercial or adding features based on market research. That never happened. We were left completely alone. That was a hugely advantageous thing about working at Funcom: a lot of trust put in creative people. The only thing we would get yelled at was for things taking longer and costing more than they should – at one point, about halfway through the production of the game, I had to sit down with Funcom's biggest investor and be yelled at for half an hour because the game was way over budget and over time."

The spark of the idea that would become The Longest Journey lay in a concept proposed by one of Ragnar's colleagues. "There was an art director at Funcom called Didrik Tollefsen," he tells us. "He had an idea for a game that was called Split Realities, a platformer inspired by a French game called Heart Of Darkness, I think. There was a lot of hype around it, especially from animators and artists because it looked really beautiful. Didrik wanted to make a game like that set in a world that was split between science and magic. I felt that doing a platformer was probably not a great idea, but I really liked the idea of playing with this split between the world of magic and the world ▶

Journey to mobile

How the longest journey was updated for iPhone and iPad

In 2014, *The Longest Journey* received an iOS port. This version featured controls updated for touchscreen and the edition of a help system to smooth out some of the frustration of the game's more obscure puzzles. The remaster also added an introduction and epilogue where designer and writer Ragnar Tørnquist gives a bit of context around the creation of the game. Unfortunately, the game is not compatible with iOS 11, so it is no longer possible to play on any devices that are up to date.

» [PC] How's that for a sunset. Don't enjoy it too long, because there's a storm on the way.

The Journey Continues

How the series carried on over the years

Dreamfall: The Longest Journey

The Longest Journey's PC and Xbox sequel returned to the story of April Ryan and also introduced two new characters: Stark resident Zoë Castillo and, from Arcadia, Kian Alvane. The game went in several new directions, implementing a third-person perspective and combat and stealth sections. Though the game was received favourably by and large, these new elements were the subject of a fair amount of criticism.

Dreamfall Chapters

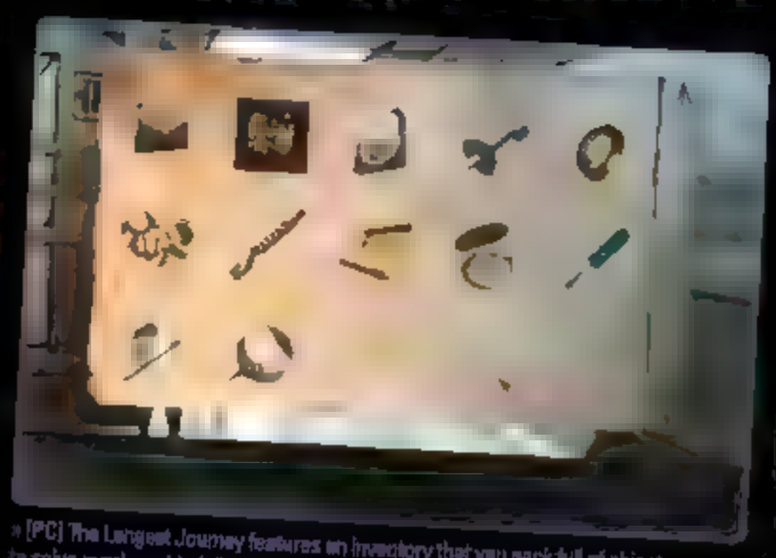
With his new studio Red Thread Games, TLJ creator Ragnar Tørnquist launched a Kickstarter campaign for another game in *The Longest Journey* series in 2013, raising $1.5 million. *Dreamfall Chapters* took inspiration from the strain of adventure games popularised by Telltale, featuring a branching story based on your choices and using an episodic structure to continue the story of Zoë Castillo and Kian Alvane, introduced in the previous game.

▶ of science, I came onto that very small team and said, 'Let's do something else. Let's make an adventure game.'

"I wrote a 200-page document outlining pretty much the entire story and everything that was going to happen," save for, Ragnar tells us, the ending. "We didn't have an ending at all, until around three months before the game was released. Endings are very difficult for me. We were basically like, 'Let's just make everything up to the point where we don't know what's going to happen and then we will know what's going to happen,' and that's a bit scary. Of course, we had a timeline which was hugely optimistic and completely wrong," he continues. "I think we started off saying it was going to be a 12 to 18-month project. This was around mid 1996, so I think the original plan was the game was going to be out by around late 1997/early 1998. It ended up taking three years."

Early on in development, the team made some practical decisions on the overall style of the game. The recent emergence of Microsoft's DirectX and a lack of animators that would be required to do 2D animation led to a decision to put 3D characters on top of 2D scenes as the least resource-intensive approach.

These 2D backgrounds, beautiful and intricately detailed depictions of the dystopic sci-fi future world of Stark and the magical fantasy realm of Arcadia, were an important part of the game's appeal and hold up remarkably well today. "We built 3D scenes in the first version of 3D Studio for all the locations in the game and then they were rendered and drawn on top of in order to make it easier to get the right perspective, so we would know where the character should be hidden by a building or not, which I think was a pretty original way of doing this," Ragnar explains. "The disadvantage of that was that today there are no high-resolution assets from that game. Everything was drawn in 640x480, so doing a visual upgrade of the game would require everything to be done from scratch."



» [PC] The Longest Journey features an inventory that you pack full of objects to solve puzzles with, following a traditional adventure game format.

The city of Newport, in which protagonist April Ryan lives, is a highlight of the game's world. Ragnar reveals that this location was inspired by the four years he spent living in New York, "based on the East Village, where I lived, and that vibrant, strange, alternative community", and that April's story of moving from the country to the city mirrored his own.

Newport as a vision of the future is leant power by the fact that it acknowledges that the future has a history, apparent in its architecture, where the new is layered on top of the old. "That's important to me in general," Ragnar says. "I've always been fascinated by ancient civilisations and cultures and the idea that what we see is a layer on top

"We set out to make a game for grown-ups in terms of language and themes, references to sex and to alternative lifestyles and things like that"

Ragnar Tørnquist

of many. I think that's also inspired by living and growing up in Norway, a country with a much longer history than the US and a country where the old and the new exists side by side. There's so much of America that doesn't have that, so it interests me to push hundreds of years forwards in time and to have that where there's architecture that looks like it's from the Twenties and then architecture that looks like it's from 2200".

The Longest Journey is renowned for its dialogue and storytelling, tackling mature themes and aiming for a more adult audience than many of its contemporaries – the game hints at April being abused by her father before leaving home, for example.

"It's not that I believe realism is the end goal, but I like every story to be anchored in reality," Ragnar says. "At the time we were making TLJ, I was inspired by reading Sandman and all the Vertigo brand comic books. A lot of them were about anchoring these fantastical magical things in reality. That appeals to me. It's very intentional to ground the whole thing and to have, as TLJ opens, yes you are living in a future world, but you are living the life of an 18-year-old young woman who is going to school and is living in this believable environment and having believable relationships before everything is turned upside down.

"I didn't want to make a cartoon or comical game," Ragnar continues. "We set out to make a game for grown-ups in terms of language and themes, references to sex and to alternative lifestyles and things like that. It was both, this is the kind of story we wanted, and this is the type of players we wanted to see, and I felt it was necessary to really create this believable reality."

If there's one area you'd highlight as a weakness of The Longest Journey, it would be some of the puzzle design and that's something Ragnar fully acknowledges.

"I think there's some puzzles in TLJ that are pretty good, but I also think there are some puzzles that are horrifyingly bad," he confesses. "Here's the honest truth: I am terrible at puzzles. I was the kind of person who wrote in to magazines asking for solutions. I sucked at puzzles and still designed, together with the team, the puzzles in TLJ. There was no philosophy or approach other than the fact that we played adventure games and knew how they were supposed to work; they were supposed to be absurd combinations of items resulting in a payoff that maybe wasn't logical but felt satisfactory in some way. I think the puzzles sometimes really break the tone of the game. Like, why are you doing all these absurd things to move forward in the game? TLJ was a bit old-fashioned in that sense. If I was ever going to go back and do something similar, I would get other people do the puzzles and try to make them less abstract."

»[PC] The location of Newport city is never explicitly stated, but Ragnar reveals it is in the US and that he imagines it being somewhere between Seattle and San Francisco.

To close our conversation with Ragnar, we ask if he has any sense of why The Longest Journey was able to buck the trend of adventure game failures and becomes a success. "I think it just proved that adventure games weren't dead. It was just about what games were available and this was an adventure game that treated its players and its audience like grown-ups, even though a lot of younger people played it".

Ragnar also suggests that the game featuring April Ryan as its protagonist played a part and offers the game as an example of why the industry's reluctance to feature women in starring roles, which he says he still encounters from publishers today, is misinformed. "We had a large audience of women playing the game," he says. "I think our audience was at least 50 per cent woman and we see that today too with the sequels – I know that Dreamfall Chapters is a game that at least 50 per cent of the audience are women. I still hear from people stuff like, 'I was a girl, this was the first game I played, the first game that really appealed to me, this game made me want to play other games'. I think that was a big part of it."

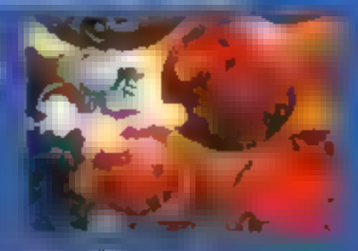
TOP 25 PlayStation 2 GAMES

With over 155 million units shipped over its lifetime the PlayStation 2 is the bestselling console in history, and home to some truly brilliant games. We asked Retro Gamer readers to vote for their favourites – and after hundreds of nominations, these were the top picks

Words by Nick Thorpe

25 Gradius V

DEVELOPER: Treasure/GRev
Shoot-'em-up YEAR: 2004



24 Virtua Fighter 4 Evolution

ER: Sega AM2
Fighting 2003

23 Devil May Cry

DEVELOPER: Capcom
Action adventure
2001

22 Final Fantasy XII

DEVELOPER: Square Enix
RPG 2006

21 Grand Theft Auto III

Rockstar North
Action adventure
2001

OLD NAMES & NEW BEGINNINGS

20 Dragon Quest: The Journey Of The Cursed King

■ DEVELOPER: **Level-5** ■ GENRE: **RPG** ■ YEAR: **2004**

There's something very comforting about the eighth main Dragon Quest game as befitting a game from the quintessential Japanese RPG series, it remains an expression of the core of the genre Like its predecessors it is a relatively simple RPG, and even by the standards of the series it has a basic plot But there's a value in being brilliant at the basics, and this game nails that in every aspect, from the beautiful cel-shaded graphics to the top-notch localisation

What makes the game extra special for us is the fact that it was the first game in the series to receive an official release in Europe, a month shy of the series' 20th birthday It's fair to say it served as a perfect introduction for those of us in the PAL crowd

WE'RE GOING TO DISNEY WORLDS!

19 Kingdom Hearts

■ DEVELOPER: **Square** ■ GENRE: **Action RPG** ■ YEAR: **2002**

What happens when you smash the beloved characters of Disney together with one of the most popular Japanese RPG series? In seeking to answer that question, Square came up with this rather excellent action RPG Kingdom Hearts expertly blends some disparate themes – a tricky job with the darker Final Fantasy worlds and the lighter Disney properties and like many Square games of the era the presentation is a cut above the competition

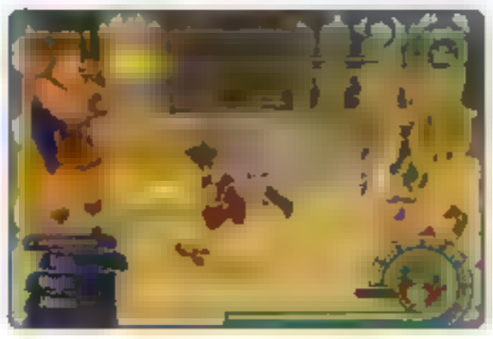
WONDER WORLDS The many marvellous locations of Kingdom Hearts

▲ Wonderland

A world of nonsense inhabited by the likes of the Cheshire Cat the Queen Of Hearts and, of course, Alice

▼ Olympus Coliseum

Hades has some trials for you in Hercules home world and you'll meet Cloud from *Final Fantasy VII*, too



▲ Deep Jungle

Tarzan, his gorilla pals and Jane all inhabit this world, rudely described by Donald as "a backwater place"

▲ Agrabah

A whole new world? No, it's the setting of Aladdin, complete with the hero, Jasmine, Jafar and pals

▼ Atlantica

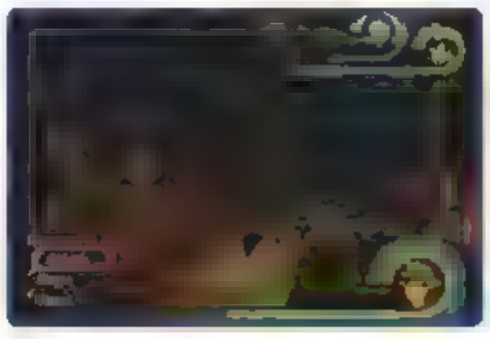
With a name like that, this could only be home to Ariel, Sebastian, Flounder and the rest of the Little Mermaid crew

▲ Halloween Town

The surprise inclusion in the game is this Nightmare Before Christmas world, featuring Jack Skellington and more.

▼ Neverland

This world centres on Hook's ship, where you'll also meet Peter Pan and Tinkerbell



THE REAL DEAL RETURNS

18 Gran Turismo 4

Polyphony Digital | Racing | 2004

Sony's realistic racing series always sells strongly, so it's no surprise to see this game make the top 25. Players

"EARTH REALLY IS FULL OF THINGS"

17 Katamari Damacy

■ DEVELOPER: Namco ■ GENRE: Puzzle ■ YEAR: 2004

This oddity is the only game that never received a UK release to reach your top 25, and for good reason. The premise is simple, playing it is satisfying, and the whole thing is a joy thanks to the colourful graphics and your irrepressibly flamboyant taskmaster, the King of All Cosmos.

THE BEAUTIFUL JOURNEY

16 OutRun 2006: Coast 2 Coast

■ DEVELOPER: Sumo Digital ■ GENRE: Racing ■ YEAR: 2006

■ As well as a complete conversion of the *OutRun 2 SP* arcade game, *OutRun 2006* includes the Coast 2 Coast mission mode and the original *Out Run*.

■ The all-important soundtrack features the three iconic tunes and various remixes, *OutRun 2*'s music, *Turbo OutRun*'s music and even some new tracks.

■ Three Ferrari cars were added to the game – the 550 Barchetta, the F430 and the Superamerica, bringing the total number of vehicles up to 15.

■ You'll have to get the impressive PSP conversion if you want to see everything in this game, as certain cars require use of the link-up feature to unlock.

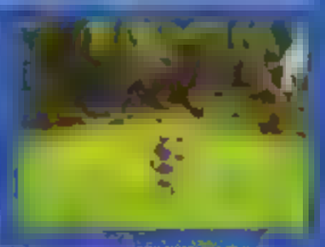
MIDNIGHT DELIGHT

15 Persona 4

Atlus | RPG | 2008

It's never easy being the new kid in a small town where everybody knows everyone else's business, but it's much harder when you're living with an uncle whose time is consumed with a string of murder investigations.

14 Jak & Daxter: The Precursor Legacy
Naughty Dog
Platform 2001



13 TimeSplitters 2
Free Radical Design
First-person shooter 2002

12 Okami
Clover Studio
Action adventure 2006

A GORE-LORIOUS BLOCKBUSTER

11 God Of War

■ DEVELOPER: SCE Santa Monica ■ YEAR: 2005
■ GENRE: Action adventure

Kratos made his debut in this Greek mythology-themed action adventure, and it's a game that absolutely doesn't do half measures – everything is cranked up to 11. The infamous bare-chested women would never pass Sony's modern approvals process, and to say that the level of violence is gratuitous is to undersell the level of bloodshed on offer. However, the same excess was lavished on God Of War's design. The game features detailed visuals running at a high framerate, a bombastic orchestral score, very satisfying combat mechanics and some of the most exciting set pieces on the console.

▲ The beast
The first big boss in *God Of War* is this scaly beast, which bursts through the ship you're running through in order to attack you.

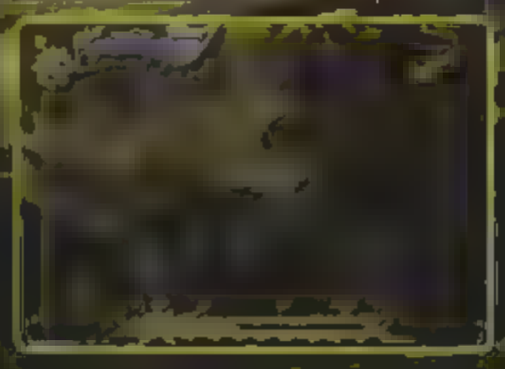
HAIL HYDRA
Breaking down GOW's awe-inspiring boss fight

▲ Twirly wirlys
Kratos does what he does best, forcing the creature into a hasty retreat by using his signature chained blades to stab it in the eye.

▼ Hard to swallow
It comes back once you reach the deck, and tries quite hard to eat Kratos – but once again, he's too strong for all that.

▲ Big head
Finally, you see that it's a hydra – and meet the biggest head of the lot! You've got to take out the smaller two first.

▼ Coup de grace
After an epic battle, you sink your blades into the main head and impale it on a mast. For some reason, the smaller heads explode too.



10 Burnout 3: Takedown

DEVELOPER: Criterion Games
GENRE: Racing YEAR: 2004

The addition of combat took this series' signature brand of dangerous driving to another level. Whether you were nudging a rival into traffic or crashing down on them from above, the satisfaction derived from smashing other racers to charge your boost made this a racer for the ages. Even getting taken out yourself was enjoyable, as you could use the slow-motion aftertouch mechanic to cause more chaos.

09 Metal Gear Solid 2

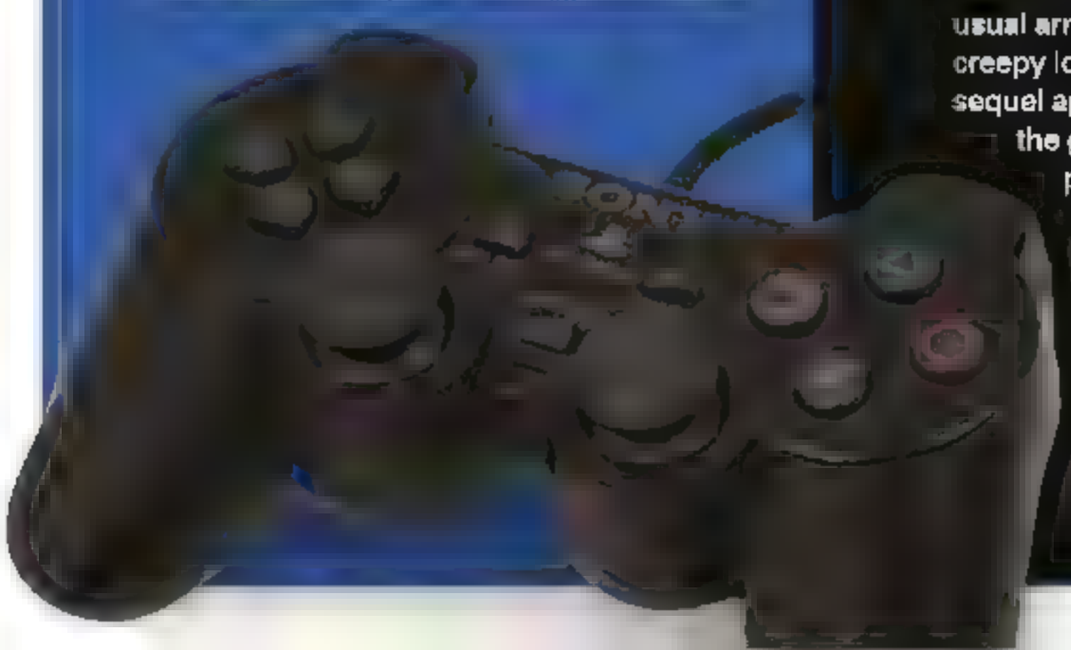
DEVELOPER: Konami
GENRE: Action adventure YEAR: 2001

Arriving on a wave of hype, MGS2 ended up being perhaps the most divisive game in the series. But while not everyone could get on board with the writing or the surprise reveal of Raiden as the game's protagonist, the stealth action was as good as ever. What's more, it's impossible to deny that it was a stunning technical achievement, displaying an astonishing level of graphical detail. If you can, get the Substance re-release for a bunch of extra bonus content.

08 Ico

DEVELOPER: Team Ico
GENRE: Action adventure YEAR: 2001

Ico takes the platforming puzzles and combat of games like Prince Of Persia as its base, then elevates that template by tasking Ico with the protection of a captive girl named Yorda. Long heralded as proof of the artistic merit of videogames, Fumito Ueda's debut switched from PlayStation to PS2 mid-development – and it came out better for it, as the more powerful machine's tech helped to create a memorable atmosphere.



THE ICONIC VILLAIN

Why Pyramid Head is Silent Hill's most memorable monster

Butcher blade

If you see a sword like that on a JRPG character, you assume it's made of balsa wood, but Pyramid Head is plenty muscular – that thing will *hurt*.

Making a point

The name points out this creature's most prominent feature – its angular metal helmet. If there's anything under there, we don't want to know.

Ragged robes

Pyramid Head's outfit, much like that of Silent Hill's executioners of old, may suggest something about the origin of the creature.

Scare tactics

When you first meet this particular creature, it's doing something grotesque – and when you do work out its origins, this makes it all the more horrifying.

"YOU **PROMISED** YOU'D TAKE ME THERE AGAIN..."

07 Silent Hill 2

DEVELOPER: Konami GENRE: Survival horror YEAR: 2001

The original PlayStation game was a classic slice of survival horror, but Silent Hill 2 was even better. Instead of revisiting the original game's cast, new protagonist James visits the town after receiving a letter from his wife – who died three years prior to the start of the game. While it features the usual array of disturbing monsters and creepy locations, what sets Konami's sequel apart from other games in the genre is that it focuses on psychological horror rather than gore, and tackles some pretty taboo themes in ways that videogames rarely approach.

06 Final Fantasy X

Square

RPG 2001

When a malevolent entity known as Sin attacks and destroys the city of Zanarkand, our hero Tidus, a prodigious Blitzball talent, finds himself in the world of Spira.

MUTATING SURVIVAL HORROR

04 Resident Evil 4

■ DEVELOPER: Capcom ■ YEAR: 2005
■ GENRE: Survival horror

■ **Ditching the fixed cameras for an over-the-shoulder view put players much closer to the action – the enemies were in your face.**

■ The addition of quick-time events allowed for action-packed scenes that hadn't been possible in previous *Resident Evil* games.

■ **Los Ganados aren't like the series' traditional zombies – they're clever (to an extent), they cooperate and they can even use weapons.**

■ Targeting individual limbs can cause enemies to stumble or drop their weapons, increasing your tactical options.

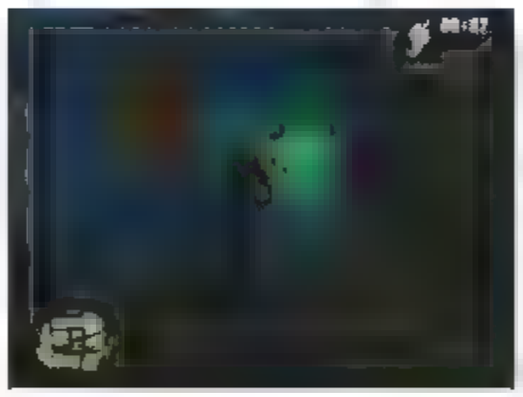
■ **As well as scavenging items as you explore the environment, you can now trade with the ever-cheery merchant for extra flexibility.**

CRIMINAL **RECORD-BREAKER**

05 Grand Theft Auto: San Andreas

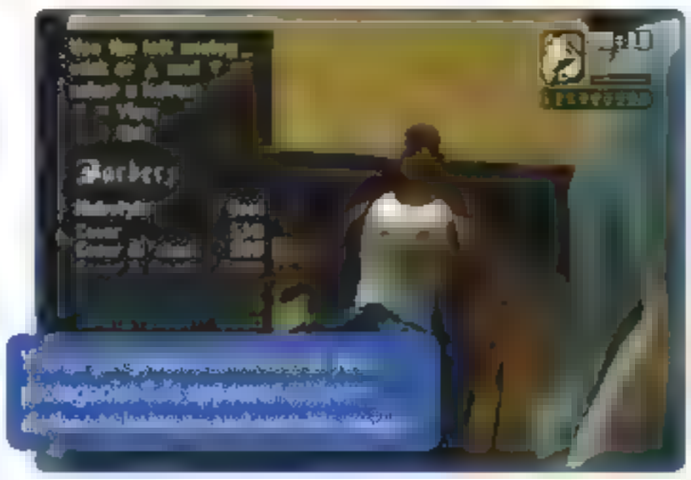
■ DEVELOPER: Rockstar North ■ GENRE: Action adventure ■ YEAR: 2004

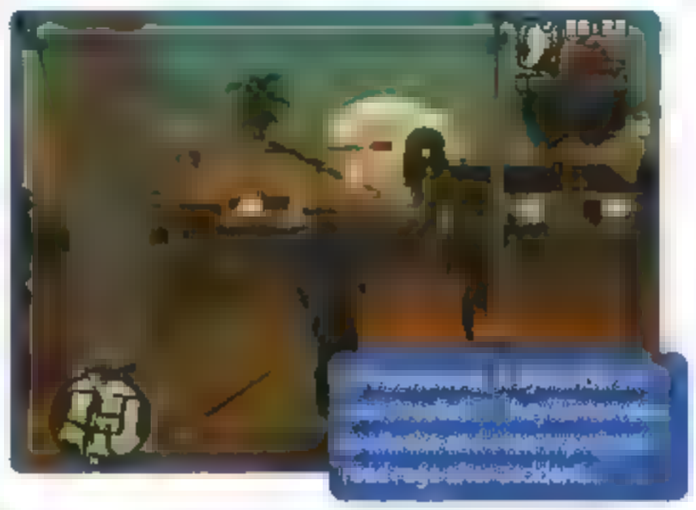
Having already used Liberty City to tackle contemporary New York and Vice City to cover Eighties Miami, Rockstar North decided to hit between the two for the end of its PS2 trilogy. The early Nineties setting and fictional state of San Andreas (comprised of takes on Los Angeles, San Francisco and Las Vegas) was the ideal backdrop for a tale of corrupt cops and gang warfare. While the game's content both used and unused drew controversy again, San Andreas is a technical triumph and with 17.33 million copies sold, the console's bestselling game.



NEW FRONTIERS

How San Andreas built on Vice City's success





"I GIVE MY LIFE NOT FOR HONOUR, BUT FOR YOU"

03 Metal Gear Solid 3

■ DEVELOPER: Konami ■ GENRE: Action adventure ■ YEAR: 2004

Set in the Sixties and starring Naked Snake – better known to series aficionados as Big Boss – this entry in the franchise tasks you with rescuing a defecting Soviet scientist, who is creating a nuclear-equipped tank (sounds familiar, right?). But out in the jungle, Snake must put his survival skills to good use in order to make progress. Metal Gear Solid 3 pleased hardcore fans by returning to a more familiar protagonist and cutting back on some of its predecessor's excessive exposition, while new players could appreciate the game's signature clever touches. The later Subsistence edition is improved with full camera control and a range of extras, so be sure to pick up that version.

MOUNTAIN MAN

A primer to survive the mountainous jungle of Tselinoyarsk

Stay camouflaged

By wearing appropriate outfits and face paint, Snake can blend into his surroundings much more effectively than ever before, using the environment to sneak into heavily guarded areas.

Keep yourself fed

You're going to feel silly if Snake gets discovered because a patrol hears his stomach rumbling. Plants, rabbits, fish and even snakes can be found in the wild and make for functional meals.

Watch your health

Got a cold? Take some medicine. Wounded? Bandage that sucker up. Fractured limb? Apply a splint and help it heal. Covert military missions are tough work, and you need to be in top shape.

Defend yourself

Snake is a master of close-quarters combat – use that to your advantage. Grab guards to interrogate them, use them as shields, or even choke them out.

THE EIGHTIES NEVER END

02 Grand Theft Auto: Vice City

Rockstar North ■ Action adventure ■ 2002

We were expecting this to take the top spot and in the early voting, it looked like it would.

READERS' CHOICE

A TOWERING ACHIEVEMENT

01 Shadow Of The Colossus

■ DEVELOPER: Team Ico ■ GENRE: Action adventure ■ YEAR: 2005

When writing about great videogames, 'solemn' is a word we've seldom had cause to use. However there's no getting around it when we talk about Shadow Of The Colossus. We experience curiosity when searching for a new target, frustration when figuring out how to tackle it and momentary elation upon doing so, but for all the individual emotions that come and go over the course of this game, it's solemnity that we always come back to.

Part of this is down to the game's striking look, a trait it shares with its spiritual predecessor ICO. You encounter only rare signs of life as you guide Wander in his quest to revive the maiden Mono, save for your steed Agro and the 16 colossi you must defeat. The world you inhabit is barren and washed-out, and you're forced to watch Wander deteriorate as he proceeds with his quest.

However, the greater part of it is that the colossi are too grand, too majestic to warrant being slain in the way that you inevitably do. It's amazing to see these giant things moving around and it feels a bit wrong to attack them, but the game is structured in such a way that each victory is ultimately satisfying – even if only briefly. The colossi function as puzzles in their own right, and a large portion of each fight is spent working out how to bring the beast down. Once you've done that a thrilling and often tense fight occurs, backed by a rousing score. Still, when confronted with a lifeless colossus we ultimately feel sorrow.

In a way, Shadow Of The Colossus is almost too ambitious. The gigantic moving enemies are so complex that the PlayStation 2 visibly struggles with the game at times, with the frame rate dropping considerably during busy sequences. The camera also causes unnecessary problems and the controls were not ideal. Yet at the time, the overall vision of the game was so compelling that we happily looked past those issues and allowed ourselves to get caught up in it. Today, that might feel harder – you may find that you prefer the solid performance of the HD version on PS3, or last year's superb PS4 remake.

But no matter whether you choose to enjoy Shadow Of The Colossus on the PS2 or another platform, those core qualities remain. It's stark, it's beautiful and it's very well designed. It's a game that you should definitely try at some point in your life. But above all else, it's a solemn journey.

BOSS RUSH SOTC would be nothing without its bosses, but which are the best?

▲ 1st Colossus

Your first foe is a simple beast. It roams around with its club, and you don't have to do much work to begin scaling its body in order to plunge your sword into its head. However we'll never forget the impact of seeing it for the first time, recognising it for a lumbering, unwieldy creature, but an incredibly imposing one at the same time.

▼ 3rd Colossus

The sheer size of the third enemy is something to behold. Most games would reserve something as large as the first for a final boss, but this one is bigger – and with its equally giant stone sword, more dangerous too. You'll have to use that sword as a makeshift pathway to scale Gaius and carry out Wander's cursed mission.

▲ 5th Colossus

The first four colossi you encounter are land-based creatures, but this one has wings and it will make the most of them. Since it can easily keep away from you, it's your job to lure it into an attack – it'll then swoop low, allowing you to leap onto its wings and take to the air for some sky-high murdering. It's quite spectacular.

▼ 14th Colossus

This chap is bigger than Wander and still counts as a colossus, even though it is a (relatively) tiny lad. What it lacks in size, it makes up for in speed and agility – you simply shouldn't attempt to take this challenge on face-to-face. Instead, you must lead it along while maintaining the high ground, until you can collapse some rocks on its head.

Eliminate Down

DON'T BELIEVE THE HYPE

» MEGA DRIVE » 1993 » APRINET

Watch a retro gaming YouTuber and odds are if they're talking about expensive games that you desperately must own, then they'll probably discuss Eliminate Down at a certain point. Standing in front of a wall of games they'll excitedly mention why it's so expensive, why it's so good and inevitably reveal its cost. I'm here to offer a counterargument for buying Aprinet's game and it's this: don't believe the hype.

Don't get me wrong, Eliminate Down is not a terrible game by a long shot (it's a very competent shooter, in fact) but is it worth the £1,000-plus it regularly sells for now? Of course not. It's certainly easy to see why Eliminate Down is so highly sought after, though, as it's an incredibly polished looking shoot 'em up. Released six years into the Mega Drive's life, its relatively late release meant that Aprinet was able to apply a lot of technical tricks and as a result Eliminate Down looks very, very pretty.

Right from the off, Eliminate Down throws you into the thick of the action, expecting you to navigate a battlefield filled with giant cruisers and nippier satellite ships. You then descend to the planet's surface, dodging ground-to-air missiles as you go, before taking on a large boss with a neat revolving arm. Later stages are just as impressive with asteroid fields to navigate, a Salamander-esque pulsating tunnel to weave through and the obligatory 'wow, this giant ship is the whole level to destroy, but it all feels very safe and like you've seen it all before. There's nothing in Eliminate Down that's as breathtaking as the prices it fetches, which probably explains why so many bootleg copies of the game are now easily available.

While it's power up system is decent — you can collect E and P pods to boost the primary and secondary weapons respectively — it's nothing you haven't seen before and lacks the elegance of similar expensive Mega Drive shooters like Musha Aleste and Gleylancer. In fact you could buy the system's best ten shmups and still have plenty of cash leftover, making Eliminate Down's insane asking price even harder to justify. I'd buy it in a shot if it appeared as a digital release on the Switch, mind. ★

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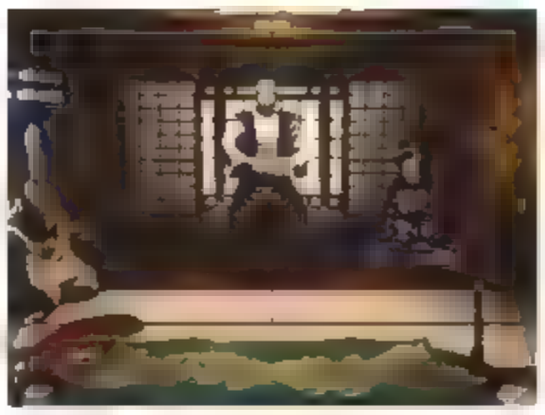
THE HISTORY OF TOTAL WAR

As a series nearing its second decade of existence, Total War has grown over the years to become one of the most beloved recognisable and consistent strategy games in the industry. But what is the history of this historical franchise?



History is such a perfect setting for videogames. From the earliest games on mainframe computers based on equally historical wargames to each new Civilization title or modern action release like Assassin's Creed that shares a love for the days of yore, there's always been value in games using history as a focus. And no series better encapsulates that than Total War, the long-running franchise that itself can be counted as a part of history. At nearly two decades old, it's a series that has simultaneously changed and remained familiar for generations of gamers. Ancient Rome, Feudal Japan, the Napoleonic era and marauding Vikings. Total War has covered two millennia of history from before the Common Era to the mid-19th Century, and it doesn't look ready for its fascination with war to end just yet.

But the history of Total War doesn't just concern itself with the details of a videogame franchise, this is a name that is synonymous with its creator Creative Assembly, in fact it's a game that made the Horsham developer one of the biggest in the UK, with now over 500 people in its employ. "I started at the company a long, long time ago in 1998," says Greg Alston, a veteran of the company and art director on the Total War series. "At that point Creative Assembly was doing ports of sports titles and I was working on these games to start with, so I was dealing with motion capture and all the animation side of EA Sports games." At this point, just before the turn of the millennium, CA had been around for well over a decade, having formed in 1987 and was quietly humming along porting games over to DOS. Similar work with EA Sports began in 1993, where the company steadily grew a healthy amount of resources and the confidence for something bigger. Michael Simpson – a key figure behind the creation of Total War – was hired as creative director in 1996, at which point the company was just five people.

> "The expectation was to just push what we could do with the engine"
>
> Greg Alston

It was here that Creative Assembly, having built up a rapport with EA, had gained the backing from the behemoth publisher to work on a new project. something different and arguably risky. The project was planned as a simple RTS, the success of Command & Conquer and the various clones that it had already spawned inspiring early development without any further direction beyond the desire to take on the genre that was, then at least, the most popular trend to be a part of. A Japanese setting was picked almost arbitrarily, the lesser used theme at least distinguishing the game from the rest of the pack gunning for C&C's glory and automatically bringing with it a sense of 'cool'. But as initial development rolled on, there was a realisation. 3dfx cards had begun to make their way into modern PCs, pushing Creative Assembly to switch the project from 2D over to 3D.

This was a radical change for the game and the genre as a whole. While Total Annihilation had implemented 3D units and terrain into the genre for the first time in 1997, this still relied on a top-down viewpoint. Shogun: Total War on the other hand, utilised 3D landscapes, with rolling hills and forestry for units – which were still sprite-based – to have to navigate. It brought the battle down to the 'general's viewpoint', Michael once suggested to PC Format, which dramatically "changed the nature of the game completely, moving it closer to the historical ideas". The only issue was the short nature of each battle, the focus on pure tactics meant that resource gathering was not an option, and as such battles would resolve quickly. There needed to be some element of management added on top, but implementing it into the battles weakened their purity. This necessity saw the addition of the turn based strategy map, bringing a layer of persistent army, resource and faction management and creating the symbiotic dual game modes that would go on to become iconic for the series.

Shogun: Total War released in June 2000 on Windows, with the Warlords expansion coming a year later. Though it wasn't a massive sales success, it still made a sizeable impact and won numerous awards and garnered high scores. By any method of measurement, the risk for Creative Assembly had paid off, and the developer changed tact to follow up with a sequel. CA wouldn't work on ports for EA's sports games again, but nor was it settling in for just a sequel, either.

"I transitioned from the sports games and started working on the art side of Medieval: Total War," says Greg, "with the idea of the big revolutionary project, Rome, being worked on simultaneously, which was a completely new full 3D thing." The follow-up to Shogun wouldn't take long to come around, but what was interesting was how Creative Assembly prepared not only for this European-

TIME COMMANDERS

How Total War was

There aren't many game engines that can say they've been used as the basis for a television programme, but perhaps that's a testament to the quality of Creative Assembly's 3D battlefield simulation. The real time combat portions of *Rome: Total War* were leveraged for the BBC and its *Time Commanders* programme running between 2003 and 2005, an exciting moment for gamers in the UK as videogames took the centre stage of a TV show. But for the staff of Creative Assembly, it was a turning point for the way they were seen among peers. "As soon as *Time Commanders* happened we could ring our relatives and say, 'Oh check this out,' and they could understand what you've been working on," says Greg Alston of the sudden boom in interest.

"I remember that because we were on the BBC we could never actually say that it was *Total War*," says Scott Pitkethly. "It would say 'thanks to Creative Assembly' afterwards, and remember our old managing director actually tried to create a new company called Total War Productions just for that, but I think the BBC were a bit wise to that."

As such, not many realised that the 3D graphics involved with *Time Commanders* were part of a game that they could actually play. "I remember reading on forums about it with people saying, 'Why doesn't it look as good as *Walking With Dinosaurs*?'" laughs Scott, "and then I had to get involved with the conversation and tell them the difference was between real-time graphics and offline rendering."

In something of a surprise, *Time Commanders* made a comeback in 2016, with three new episodes being aired and running on versions of *Rome II*, *Attila* and *Napoleon*. "I think that *Total War* did have some closet fans," says Scott of Masterchef's Greg Wallace, who hosted the more recent episodes. "He was quite a big fan of *Total War*."

> "At one point we experimented with a fully real-time campaign map and battle map"
>
> Greg Alston

themed sequel but something even more spectacular. "What was really quite unique was that we had a team following up on Shogun working on Medieval," explains Greg, "but then we had another team working on Rome. So we had the sprite system of Shogun and Medieval, and then in the background had another new engine that was using all this cool 3D, with all the characters moving smoothly across the landscapes after basically taking the tech from the sports games." In that sense the intention with Medieval was a stopgap, a fully fledged sequel that gamers were clamouring for after Shogun but that made as much of that initial Total War experience as possible before the true 3D engine was unleashed. "We had targets, obviously," recalls Greg. "The expectation was to just push what we could do with the engine, trying to make it more European in terms of the landscapes. I know we spent a lot of time with the portraits, so the idea was that each lord would have their own identity through their portraits, so we developed a very rudimentary way of generating lots of 3D portraits." Greg adds that Medieval was "more of an evolution product" due to the real target being the company's work on Rome.

Even so, the game was equally as well received and it enhanced practically every aspect of Shogun with new features like castle sieges, larger armies, battle maps that were related to where the confrontation was begun on the strategy map, and an expansion to construction and technologies. Timing wasn't on its side, however, launching in August 2002 at a time when Warcraft III, The Sims and its Vacation expansion were topping the charts, ultimately landing at a respectable fourth place in the charts behind these three. That didn't quite matter, however. Total War was already becoming a desirable name, and Rome was looking set to create something truly special.

By working so often with EA on FIFA, Rugby and the like, CA had managed to add a sizeable string to its bow, namely its in-house motion capture studio with which it could create the sort of visuals that no other RTS had come close to before. "That was quite unusual," says Scott Pitkethly, another series veteran and currently technical director on the franchise. "For a company of our size to own their own motion capture studio, I don't think anywhere else of our size would've had that. I think that was quite important to put us above everyone else in terms of the animation that we would typically have for an RTS game. We were one of the only companies that had that."

Though Scott was also already working at Creative Assembly on its sports titles, it was with Rome that he would first start his career with Total War. The point here was to build a new

engine, one that would take the core aspects of what many were already feeling was a 'Total War experience' and overhaul the rest for something very special. "With Rome we really wanted to make something absolutely revolutionary," explains Scott. "In fact, we tried all sorts of things that just couldn't make it into the game. For example at one point we experimented with a fully real-time campaign map and battle map so everything worked in real-time. We quickly realised that that made absolutely no sense, how do you merge between two completely different timescales? That eventually got abandoned, but that sort of illustrates how we wanted to start again, to try and rethink everything that we'd done."

With the fully 3D engine and the high-quality visuals, Rome: Total War provided a much more absorbing experience, the ability to zoom in close and watch as warriors hacked away at each other putting the player into the midst of a battle like no real-time strategy game had before. But this was not without its challenges. "As soon as you up the fidelity going from a two-dimensional sprite to a three-dimensional man, everything has to be much better or it looks terrible," says Scott. "So

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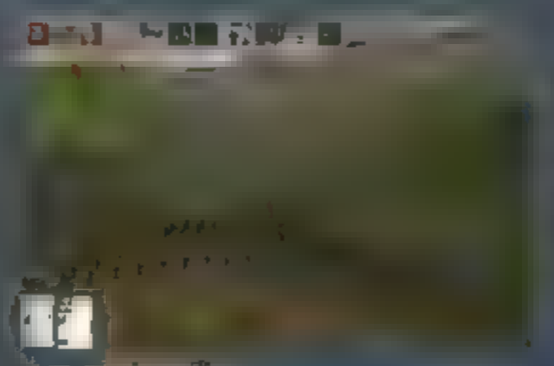
MASTER STRATEGIST

Key strategies and how to use them

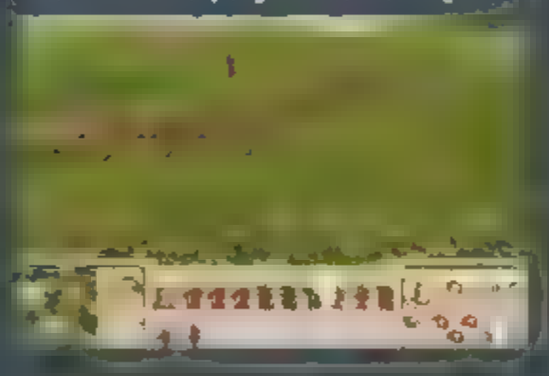
■ Easily the most important strategy, flanking is the concept of attacking the exposed sides of a troop. From the back with a swift cavalry charge is the best way of doing this, but a pincer movement – whereby you'll attack on both the left and right flanks – is also effective.

■ One of the simplest strategies is to force an uphill battle by taking the higher ground. This give your archers an advantage, slow the assaul from the enemy and tire them out, giving you time to easily and effectively chip away at their numbers and morale for an easy win.



■ Archers give an advantage by allowing units to deal damage before the melee takes place. When attacking make sure to have your archers up front and, once in firing range, have your infantry charge forwards. Once the clash takes place move the archers around to the flanks.

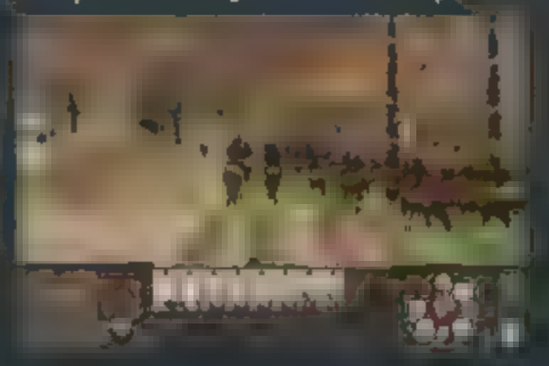
■ Popular in Ancient Greek and Roman battles, the concept of this manoeuvre is to have a defensive infantry unit like spearmen 'hold' the enemy in place (the anvil) while cavalry or shock infantry units (the hammer) rush around the back and force the enemy to get sandwiched together.



■ It's good to focus on these units because a defeated general will severely affect the enemy's morale, and once that is gone the battle is basically won. In later games, peppering the general with cannon fire is a very cheap way of inflicting serious morale damage early on.

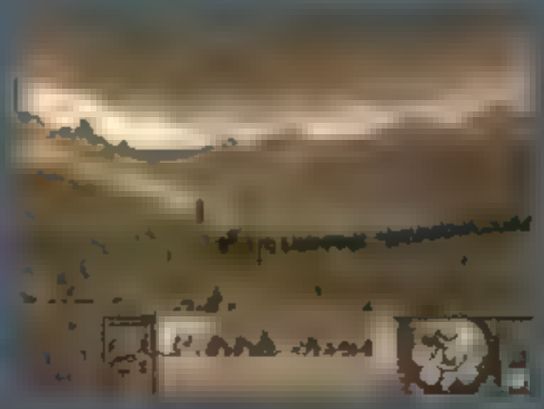
■ Use lighter armoured units with short range weapons like javelins as a way to harass enemy troops. On defence this means having them on the frontline, then running back behind a stronger unit after dealing damage. On attack, have the infantry lead with skirmishes flanking.

■ Ambushing from the forests is trickier to pull off than newcomers might expect. However, forests can still be effective for protecting your units from archers and cavalry; you're equally as ineffective in this regard, but forests are great for when you're marching towards the enemy.



MASTERFUL MODS

The best mods of Total War



■ Widely considered to be one of the best

conversion of *Medieval II* not only makes sense given the systems of the base game, but is a impressive feat of work from all involved. The whole game is overhauled, with new units for the various factions and creatures of Tolkien's world and a completely new, not-of-this-world strategy map, too

BARBAROSSA

■ Creative Assembly did release its own barbarian-themed expansion pack for *Rome*, but the creators of this mod weren't satisfied with the historical depth of the barbarian factions. However this was just the foundation for the initial mod which completely reworks the factions of *Medieval II* to allow for better realism

THE AMERICAN REVOLUTION

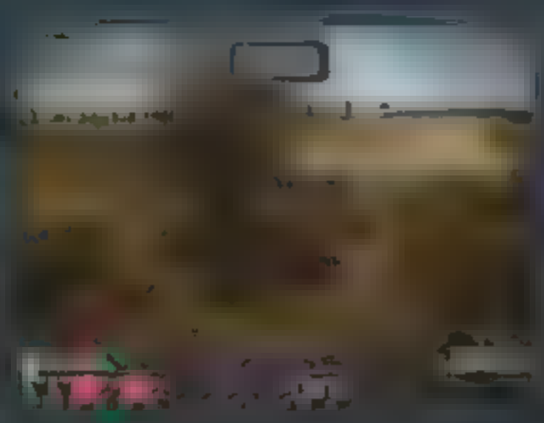
■ Despite the interest in the American Civil War era and the timeline that Empire and Napoleon cover, the important American conflict hasn't officially been tackled by Creative Assembly. That's where this mod comes in, with more realistic units, starting positions and everything that players keen to play this era will want

BROKEN CRESCENT

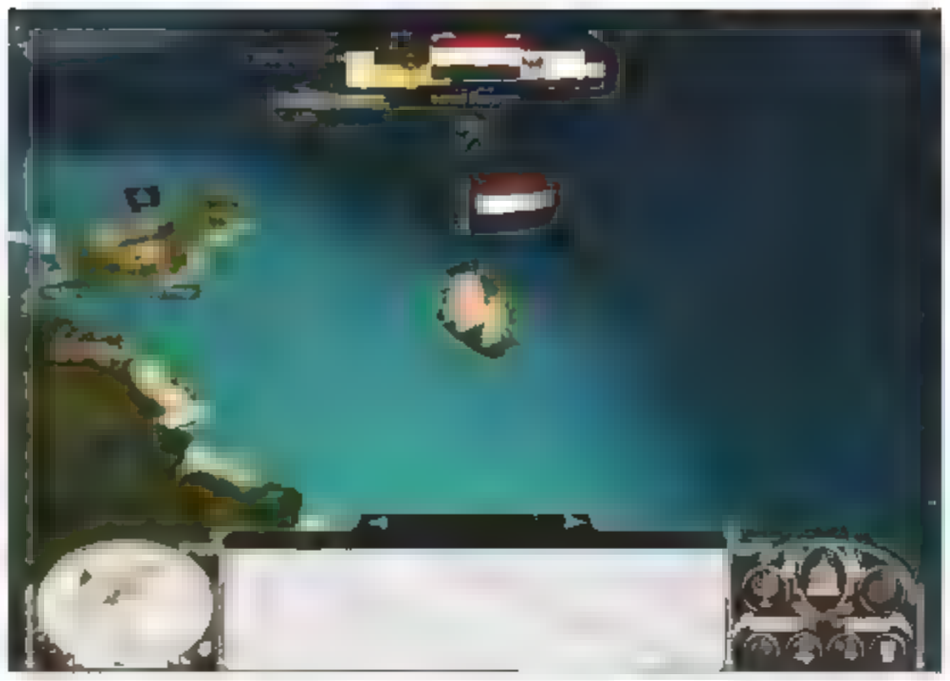
■ The Middle East has only been slightly touched on by official *Total War* releases, typically with the edges of the Turkish or Egyptian empires. Broken Crescent shifts the strategy map of *Medieval II* over into the diverse armies and factions of the area, adding in over 300 units, a new strategy map and enhancements to aspects like religion and economy

THE GREAT WAR

■ This is perhaps the hardest wartime era for Creative Assembly to deal with, what with the formation-driven combat engine being better suited to traditional military eras. The Great War mod proves not only that World Wars can work with the *Total War* systems, but also that we should be forever grateful for the determined energy of modders that create such great extras completely for free



PC. The naval battle simul
art of Empire



▶ when they're fighting. If you've got two sprites then get them near to each other and play the attack animation and everything looks rosy. But try and do that with two guys fighting that are 3D men, then you get problems." The move to a 3D engine made everything "a magnitude more difficult", since aspects like collision, animation and realistic interactions became more important. It was worth the effort, though, Rome: Total War went on to become a milestone for Creative Assembly.

Releasing in September 2004 a year after Medieval's Viking-themed expansion pack, Rome: Total War was a success, earning several awards and high scores. In fact, Rome remains one of the most beloved Total War games, making it into a number of 'best games of all time' lists and the only game of the long line of titles to have made the complete transition over to mobile years later.

The combination of the Roman setting, impressive 3D visuals and the intricate strategy of the game meant the game smashed records. Creative Assembly became a big name, and at this point Total War was known to many, even outside of gaming. "Basically when just porting sports games," recalls Greg, "you just feel like I wouldn't say a poor

> "I was like, 'Wow, I'm working for a company that's on a TV show!'"
>
> [illegible]

man's developer, but when you're doing conversions you don't get the same kudos. And then all of a sudden we're in the limelight."

The game gave Creative Assembly a boost to its reputation, which thrilled some of the staff working at the studio. "I remember us being on that TV show, Bad Influence!, which was a computer game TV show from the Nineties," says Scott. "And I was like, 'Wow, I'm working for a company that's on a TV show!'" And this wasn't the only show that the game featured on, with a version of Rome's engine being used on the History Channel to recreate historical moments for its Decisive Battles series and on the British series Time Commanders where history fans pit their own strategies against one another. It was a time of huge significance for Total War, giving CA a huge boost to publicity. "All of a sudden it gave a buzz of a place that's going somewhere," adds Greg.

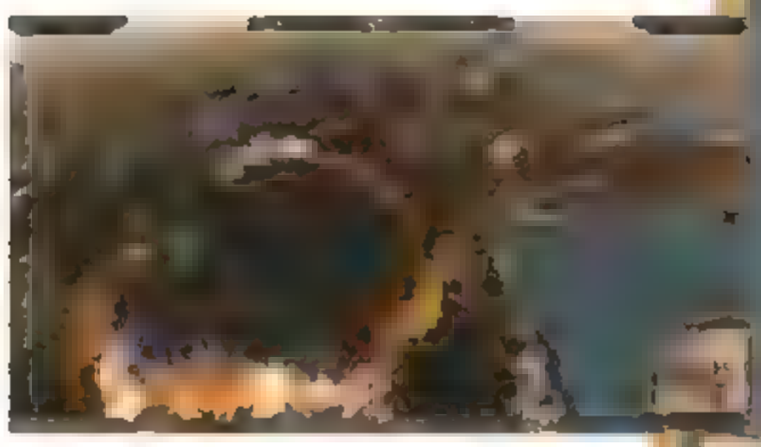
Rome was followed up by two expansion packs, the first focusing on the migration period of the fourth and fifth centuries in The Barbarian Invasion released a year later in 2005, and the second revolving around the life of Alexander The Great that released in 2006. But it was also in 2006 where a follow-up to Rome was released, shifting the European theatre of war ahead a thousand years and returning to the Middle Ages with Medieval II. "I do think that Rome and Medieval are always our two most popular eras that we have," explains Scott, "both in the studio and in the community. So I guess that's why – now we had made what we saw as the 'best' RTS or 'grand strategy' engine we wanted to give the other great kind of era the attention that it deserved." This brought with it the visual enhancements of the new engine, the most playable factions yet at 17, numerous tweaks and additions and features like assassinations that CA didn't have the time to bring over from the previous games alongside the new engine of Rome.

Though the response to Medieval II was muted in comparison to Rome, it was a success all the same and went on to remain a persistent favourite for fans, particularly those who prefer the period of European upheaval that the game tackled. Creative Assembly once again set its targets on something new with an idea that was even more dramatic than Rome's 3D engine. "There was a desire to do the gunpowder era," says James Green, one of the designers on Empire Total War, "and obviously that implied naval battles because that was the Age Of Sail. In terms of the engine rewrite, back then they were in a loop of rewriting the engine every two games, but that time period was the starting point."

This meant that in addition to the existing format of strategy map and real-time land battles, Creative Assembly now needed to add in a third mode: naval battles. This was alongside a new engine with enhanced visuals to match the expectations of PC gamers of the time. "When you embark on creating a new engine," adds Scott, "you say 'we're going to solve all the problems that we had before' and you do solve those and avoid a lot of the pitfalls that you had before, but find a whole load of new ones that you hadn't encountered before because you hadn't gone in that direction before. It took us a long time to get that engine running, like years."

The effort was worthwhile, however, because with the third new engine for the series came another smash success in March 2009, thanks to the myriad new features and improvements: the modern(ish) conflict and the rejigged strategy map to go with it. All this combined to make it the fastest selling Total War game of the series, a massive success for the company, but this time things weren't all that peachy. The decision to build such a huge engine from scratch resulted in some flaws, most notable being issues with the AI, problems with coordinating combat on the naval battles and even technical faults that affected installation. As well received as it was critically, the community wasn't quite so taken with these issues, leading the company to post a blog addressing the concerns and committing to post-release fixes – a six-month ordeal that did finally solve the setbacks.

The Warpath Campaign expansion came more quickly than any other, releasing six months later in September of the same year, while a sequel, Napoleon: Total War, arrived five months later in February 2010. The latter was "the obvious follow-up", as James puts it, adding that there had been discussion during the development of Empire to extend the campaign on a bit but was delayed for a full release due to Napoleon's importance in military history. The new game enhanced the Empire engine with visuals that were a significant step up, rectified a lot of the issues before it and allowed players to relive the most important moments of Napoleon's career. But most integrally, Creative Assembly had learnt its lesson about building new engines; no longer would it make something from scratch, and instead each new game since Empire has been a iterative enhancement of that game's Warscape engine. At this point the Total War series had



settled into a groove, something that the response to Napoleon kind of epitomised. Fans and critics alike enjoyed the familiar blend of real-time and turn-based combat, but that familiarity naturally came with a certain lack of novelty. Total War: Shogun 2 returned the series to its roots, and by not having to build an engine the developer could focus purely on the gameplay. "Shogun 2 had a different philosophy," recalls James, "it was a little bit like a rewrite or a remake of the first one in a way, but we didn't really go back and do a 1:1 copy of repeating what Shogun did." The idea was to return to the core play of tactical battles, with Greg adding that it was important to go "back to the rock-paper-scissors, simplified kind of gameplay" that the series had been built on, to "try to get back to the roots".

This focus on the core gameplay outside of any new major engine overhaul, must've had an effect, however, since the game released in 2011 to huge praise and yet still remains one of the most beloved games of the franchise, sharing space with Rome and Empire in both critical scores and best strategy games' lists. "It's probably the purest Total War that we've ever made," suggest Scott, "and for some people that means it's their favourite Total War." Then came an attempt to relive the greatness of Rome, but while the 2013 sequel with Rome II marvelled through its visuals, its cinematic battles and its greater focus on campaign storytelling, it didn't seem to draw in the same appeal.

Since then the series has suffered a curse that many successful franchises tend to endure. 'Familiarity breeds contempt', they say, and by being unable to surprise its players any more, Total War began to struggle with such a fate, despite the consistently high quality of each release. 2015's Attila dealt with the Huns, while 2018's Thrones Of Britannia had tighter focus on only the British Isles and their oft-changing rulers. Neither thrilled, however, with most agreeing that they were still solid releases, adding enhancements, changing the theatre of war and keeping things fresh... but just not fresh enough.

This overlooks a rather major stepping stone for the franchise, however, when in 2016 Total War was partnered with Games Workshop to result in a huge shift for the series. The obvious pairing of Total War with Warhammer brought Creative Assembly's iconic two-mode gameplay into the realm of fantasy for the first time. "The great thing is that we could push it more," says Greg of the two Warhammer titles. The historical subjects of the previous games were restrictions because, as Greg puts it, they were "bound by believability and historical context", but with Warhammer "all bets are off" in so many different ways. Scott adds that CA did more prototyping with Warhammer than with any Total War game for a long time because "we had lots of stuff where we just had no idea how they would work". And while both the 2016 and 2017 releases of Total War: Warhammer did stand out for the franchise in terms of critical appeal, they had an added effect of bringing in an audience that hadn't previously been invested in the series, with Scott suggesting that this had a knock-on effect on bringing those newcomers into the fold. The addition of flying beasts and giant ogres, magic and quests, or distinctly different factions changed everything about the game, from the toe-to-toe action to the grand strategy on the fantasy map. It was a triumph, and proved that CA's unique pairing of gameplay modes could work just as deftly when used outside of the realm of historical realism.

The thing with history is that it's always being made, and the franchise that ultimately gave rise to Creative Assembly still has plenty of years on the throne, just yet. 2019 will see the release of Three Kingdoms and is the first time that the franchise tackles Chinese history, but the pertinent question isn't 'will it be good?'. While some releases are more game-changing than others, this is a franchise that has gone from strength to strength, and so it's unlikely that there will ever be a time that it won't be compelling to play history from the general's viewpoint.

KEY BATTLES

Whether it's significant individual battles, a series of important clashes in a particular campaign, or reliving the world's most important historical moments, Total War has recreated them all

BATTLE OF HASTINGS
BATTLE, ENGLAND

■ As GCSE history classes have already told us, 1066 was an important year for the British Isles. The Battle of Hastings has shown up on a couple of occasions in the *Total War* franchise, yet while the armies involved are typically well presented, here victory isn't won by a stray arrow in King Harold's eye.

BATTLE OF THE RIVER TREBIA
ITALY

■ This famed battle was a devastating defeat for the Romans, who anticipated great success against Hannibal and let overconfidence trick them into a trap. This battle was one of the historic battles recreated on *Time Commanders*.

BATTLE OF WATERLOO
WATERLOO (PRESENT-DAY BELGIUM)

■ As the conflict that saw the end of not only the Napoleonic Wars but also the long-lasting tumult that Europe as a whole was suffering during the 18th and 19th centuries, it's only right that *Total War* should make this decisive battle playable.

"Shogun 2 had a different philosophy, it was a bit like a rewrite or a remake"

Daniel Green

100 YEARS' WAR
FRANCE & ENGLAND

■ This series of wars are so important to French and English cultures that even now the aftermath is felt between the two countries. Naturally the Medieval games allow gamers to take on these historic campaigns the way they'd like, as well as take part in particular momentous battles, too, such as the one at Agincourt.

THE BATTLES OF ODA NOBUNAGA
JAPAN

■ Arguably the most iconic of Japanese leaders, Nobunaga's military leadership was ruthless, tactical and innovative. As the first to unify Japan – at least the first to achieve it, for the most part – Nobunaga's historical campaign is certainly one that had to be included in *Shogun: Total War*.

BATTLE OF BADON HILL
BRITAIN

■ Legendary King Arthur doesn't get much in the way of historical recognition due to the lack of information, but the battle of Badon really did happen – and it sounds like it was an interesting one. In fact, *Total War*'s recreation of the event might be the closest thing any of us could get to understanding the event.

SIEGE OF SPARTA
SPARTA, GREECE

■ After the film *300*, Sparta and the Spartans have been idolised in many ways. While *Total War*'s historical battles doesn't have people being kicked into bottomless pits, the historical siege does still require taking on the shield and spear warriors in their iconic stance.

CAMPAIGN OF ATTILA THE HUN
HUNGARY

■ The fearsome wars that Attila The Hun waged on Rome and much of Western Europe made his campaign a significant one, so significant, in fact, to even get a *Total War* game based on the fifth century European upheaval.

THE THIRD CRUSADE
JERUSALEM

■ The *Medieval* games generally focus on the Crusades, particularly the Third Crusade, since they were such a driving force behind much of the conflicts of the time. However, *Medieval II* also allows for a series of historic battles based on the events, eventually telling the story of Richard the Lionheart.

BATTLE OF TRAFALGAR
CAPE TRAFALGAR, SPAIN

■ One of the most important naval battles of history, Trafalgar saw Britain exert its dominance of the seas as it took on a considerably larger Franco-Spanish force without losing any large casualties. *Total War: Napoleon* lets you test your own tactical thinking to see if you can do the same.

MEIJI RESTORATION
JAPAN

■ One of the most fascinating periods of world history, the Meiji Restoration was the setting for the *Shogun 2* standalone expansion *Fall Of The Samurai*. This is a must-play due to the historical context, that saw influence from the West cause Japan to devolve into a civil war between the traditionalist shogunate and the modernist imperials.

» PUSHING THE LIMITS

Terracon

An amazing 3D showcase on Sony's debut console, cruelly overlooked thanks to its PAL exclusivity

» **PLATFORM:** PLAYSTATION » **RELEASED:** 2000 » **DEVELOPER:** PICTURE HOUSE

If you're a fan of the PlayStation, you might well remember Die Hard Trilogy with great fondness. The licensed game was a sales success and offered great value, thanks to the decision to represent each film as an independent game – a 3D run-and-gun for the original, a lightgun shooter for the second and a driving game for Die Hard With A Vengeance. Ultimately, quite a few members of the core team behind that game would leave Probe and form a new company called Picture House. These included veteran coder Simon Pick, artists Dennis Gustafsson, James Duncan and Paul Heman and level designer Alec Prenter, amongst others.

Terracon was the debut game for Picture House, a PlayStation exclusive that was picked up by Sony in Europe and Midway in North America. The game casts you as the plucky alien Xed, who's fighting to stop the titular Terracon after it goes rogue and starts destroying planets. In game design terms, this translates to a third-person action game, in which you shoot baddies and run around large environments completing various objectives.

What made Terracon stand out on PlayStation was its clever use of the system's 3D hardware. Where early games on the system had been riddled with pop-up, Terracon had large stages with massive draw distance. This was achieved by adjusting the detail of objects and terrain based on their proximity to the camera, adding extra polygons and filling in textures as you approached them. The game also boasted heavy use of particles and transparent polygons, some great lighting effects and a pretty advanced water effect, with moving polygons and an animated texture.

The press reacted reasonably well to Terracon. Official PlayStation Magazine gave it 8/10 and described it as "peppered with original touches", while Play called it "enjoyable but repetitive" and scored it 80%. However, the game has been largely forgotten now – it doesn't seem to have made much impact in Europe, and Midway ultimately cancelled the planned American release. That's a real shame because the game deserves better than to have faded into obscurity, so pick it up and give it a go. If nothing else, you'll see your PlayStation working very hard indeed ★

HOW IT PUSHED THE LIMITS...

Massive Maps

Terracon has some pretty huge stages by PlayStation standards, which can be freely roamed without any extra loading breaks. There are over 35 stages to explore too, so you'll have plenty of them to keep you occupied

Draw Distance

By scaling the level of graphical detail depending on an object's proximity to the camera, Terracon manages to avoid the fogging, pop-up and design trickery commonly employed to mask the hardware's limited capabilities

Exciting Effects

This game is full of impressive visual effects, from multiple light sources and particle effects to time of day cycles, and from wave effects in the water to the cool transparent meshes you fill in with your Genergy blaster

Clever Camera

When Xed would be hidden by an object in the foreground, the game applies semi-transparency to the object that's hiding him – but interestingly, only to the polygons that are blocking him from view

“There was a certain freedom in making games back then that made it seemed perfect”
Chris Shrigley

In the chair with...

CHRIS SHRIGLEY

With a career spanning four decades, Chris Shrigley has an impressively varied roster of games in his locker. We chat to the veteran coder about his career on both sides of the pond

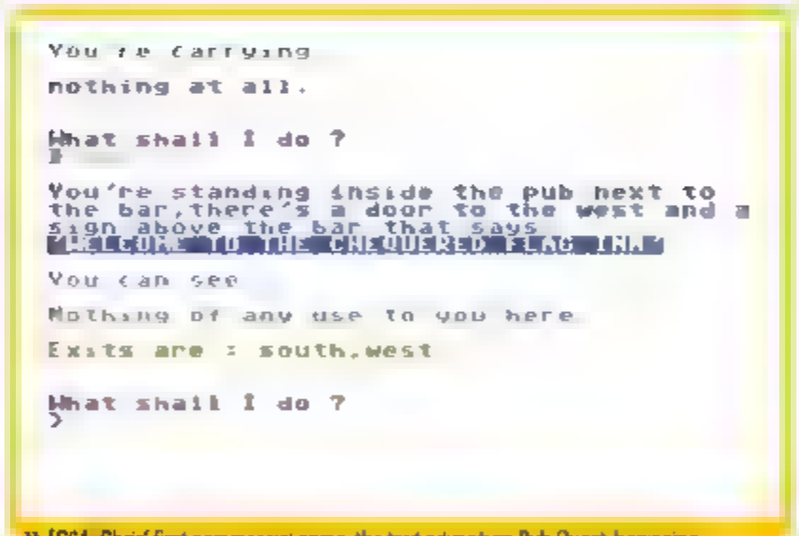
Words by Graeme Mason

Born in Derby, on the "tough streets of Seventies suburban England", before videogames became the phenomenon we know today, Chris Shrigley, self proclaimed former latch key kid, and brother to two bossy sisters, loves his mum as any good coder should. "She was strong and intelligent, and I was pushed around by my sisters. All of this explains a lot, actually," he grins. Leaving family politics behind, an unsuccessful career as a paperboy mirrored the videogame incarnation of that particular youthful profession ("I was crap at it, and eventually got fired for not delivering all the newspapers,") before a brief role at a local printing company. Then, fortunately for this feature, Chris began a 35-year career in gaming that continues today, initially at a little software house called Gremlin Graphics.

So Chris, how did you come to work at the Gremlin offices?
I made a game called Bounder with some mates, and we sent it off to Gremlin to see if we could get it published. We were going to send it to Ocean, too, but we could only afford to make one package to send off! Gremlin was top of our list, and they snapped it up, along with us. We were all offered jobs after visiting the Sheffield offices around November 1985, and started working there in January 1986.

We'll get to your Gremlin games shortly. In the meantime, how did you discover the technological marvel that are computers?
I discovered a Commodore PET hiding at the back of a classroom at school, and had played on my friend's Binatone TV Master when I was ten years old. They first whet my appetite that TV could be interactive, and discovering the school computer room really changed my life, and put me on the track to becoming a games programmer. Before that, I was a below-average student, bored and unengaged with academics. Computers changed that completely, and became an obsession I still have to this day.

A real sliding doors moment there, and when it came to home computing you plumped for the Commodore 64?
Yep, got it for Christmas 1982 after finally persuading my mum it was a good idea – cashed in a savings account my grandad opened when I was a baby, and along with some of my mum's hard-earned money, ordered it from First Byte Computers in Derby City Centre. I would carefully unpack it each time I wanted to use it, and lovingly repack it once I was done for the day. It was probably the first thing I ever really owned that was truly mine that wasn't shared or a hand-me-down.



» [C64, Chris' first commercial game, the text adventure Pub Quest, beginning, appropriately, outside a pub

Heartwarming stuff! But what about Commodore 64 games?
I was too poor to have many games to begin with, so I would program my own little games and type in magazine listings. After a few months I started swapping games with my mates and bagging free stuff from friends who worked at the local computer shops in town.

How and when did you start coding?
My first experience was in the school computer room, programming a PET in BASIC. At first I wasn't allowed to even touch the computers and would sit and watch the big kids play PETSCII games like Lunar Lander and Cosmic Jailbreak. Then, as soon as I started the

> "Having a published game made me a bit of a celebrity with my mates at the computer games shops"
> Chris Shrigley

SELECTED TIMELINE

GAMES

- BOUNDER [1985] COMMODORE 64
- FOOTBALLER OF THE YEAR [1986] COMMODORE 64
- FUTURE KNIGHT [1986] COMMODORE 64
- MASTERS OF THE UNIVERSE [1987] COMMODORE 64
- SKATE CRAZY [1989] COMMODORE 64
- ADVANCED PINBALL SIMULATOR [1989] COMMODORE 64
- ACTION FIGHTER [1989] NES
- MAGICIAN [1990] NES
- JAMES BOND JR [1992] NES
- EX-MUTANTS [1992] MEGA DRIVE
- BATMAN RETURNS [1992] MEGA CD
- CLIFFHANGER [1993] MEGA DRIVE
- GARGOYLES [1995] MEGA DRIVE
- NHL 98 [1997] MEGA DRIVE
- BASSMASTERS 2000 [1999] NINTENDO 64
- PACMAN FEVER [2002] PS2
- METAL ARMS: GLITCH IN THE SYSTEM [2003] PS2
- BLACKTHORNE [2003] GBA
- THE LOST VIKINGS [2003] GBA
- ROCK 'N' ROLL RACING [2003] GBA
- FULL SPECTRUM WARRIOR [2005] PS2
- FULL SPECTRUM WARRIOR: TEN HAMMERS [2006] PS2
- TETRIS EVOLUTION [2007] XBOX 360
- PIRATES OF THE CARIBBEAN ONLINE [2009] PC
- TOONTOWN ONLINE [2010] PC
- IMMORTAL DARKNESS: CURSE OF THE PALE KING [2018] PC

third year, I was allowed to choose subjects and computer science was top of the list. I would then spend every spare minute sitting and programming, most of it class related, such as writing small programs to solve maths problems or display data as bar charts. For my first O Level I programmed a sales and inventory tracking system with a scrolling bar chart visualisation in BASIC and assembly language. It was very swish, but still failed my O Level, although it transpired that our teacher had taught us the wrong syllabus a year so no one knew any of the [illegible] questions.

What was the first authentic, wholly original Chris Shrigley game?

My first truly completed game, and the first one I got published, was a silly little text adventure called Pub Quest. It was published by Dream Software and I was very chuffed with it, with a few copies even turning up in the computer section of Boots. Also, having a published game made me a bit of a celebrity with my mates at the computer games shops, and got me [illegible] free [illegible].

Result! So tell us about your games at Gremlin

Bounder was a really original game and sort of evolved over the first couple months of development. It began as a fancy parallax scroll demo, wanting to be a Marble Madness clone, before ending up as the game everyone knows. Then we did Future Knight, which was our Ghosts 'N' Goblins knock-off, and although it was original, it lacked inspiration and was a bit rubbish. Then came Footballer Of The Year, which started out as a board game that some fella sent in to Gremlin. The powers that be thought that the game had potential, so they bought the rights to turn it into a computer game. The first version was on the C64, and it was my first solo game, meaning it was the first one I programmed all by myself, and not as a team with Andy Green. The whole project was a massive learning experience, a baptism of fire, and I also worked on the Atari and MSX versions.

After that trio of original games, next was your first licensed game based on the Masters Of The Universe movie.

We got the movie script and a bunch of reference art and materials, and went to London for a private screening before it was in the cinema. It was designed on the Commodore 64, and we had free [reign] to do whatever we wanted, with minimal input and oversight from the IP owners. I think I had a little bit of input on the game design, mostly moaning about how rubbish the map system was!

Despite being busy at Gremlin, you still had time for a cheeky side project...

We were cranking games out every four months or so in the Derby offices. Not sure about the timing, but I think Advance Pinball Simulator was done while working for Gremlin before it became Core Design. Terry Lloyd and I did it for some extra money, and we did it on the sly, pretty much. It took a couple of months to make, using the Spectrum version as a reference, and we had fun making it.

After Core, you helped form and worked with Eurocom in the late Eighties/early Nineties, and entered the world of consoles

After I was fired/quit from Core, I started Eurocom with Mat Sneap and others. Eurocom was my introduction to console programming, specifically the NES. I designed Magician and programmed James Bond Jr before leaving to find my fortune in America.

Ah the land fortune and glory! How did that move come about?

My good friend Andy Green got a job and moved to America, and whenever we chatted on the phone, he'd wax lyrical about how good it was in California. Eurocom was on shaky ground so I agreed to an interview with Andy's boss, Bob Jacob. It went well and I was offered a job working at Acme Interactive.

» NES The charming NES RPG Magician was designed by Chris.

FIVE TO PLAY

The classics from Chris you should take a look at

BOUNDER

■ Fun yet brutal, *Bounder* gave Chris and his friends a huge critical and commercial hit for Gremlin. The object of the game is to simply guide a bouncing ball across numerous devious scrolling landscapes, avoiding obstacles and pitfalls. A difficult, yet hugely rewarding game for determined gamers.

FOOTBALLER OF THE YEAR

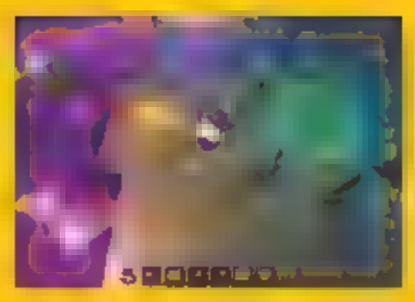
■ A novel take on a football game as the player took control of just one footballer in an effort to achieve personal glory in the beautiful game. While not as smooth as *Bounder*, it was different enough to become another success for Gremlin that lacked much depth of simulation beyond its core concept.

EX-MUTANTS

■ As a comic book nut, working on this adaptation of the Malibu book was a dream come true for Chris. Drawing on Chris' love for arcade games, *Ex-Mutants* is oppressively tough in places, but remains an attractive if somewhat run-of-the-mill platform adventure, notable for a neat scrolling section atop a subway train.

METAL ARMS: GLITCH IN THE SYSTEM

■ Set on the planet Iron Star, *Metal Arms* follows robotic hero Glitch in his battle against General Corrosive. A third-person action shooter, Mass Media's PS2 conversion retains much of the Xbox game's smooth graphics and accessible game design.



IMMORTAL DARKNESS: CURSE OF THE PALE KING

■ Featuring real-time tactical combat melded with an uncluttered dungeon crawl aesthetic, *Immortal Darkness* harks back to RPGs of old such as *Icewind Dale* and Dungeon Siege. Story-driven and intense gameplay make this a winner for any fan of the genre.

Having risen from the ashes of Cinemaware, Acme was soon taken over by Malibu Comics. What was this time like?

Yes, they merged with the local comic book publisher. It was very exciting to a game and comic nerd like me, particularly when comic legends like Stan Lee and Jack Kirby toured our offices.

Here you began your education of the Sega Mega Drive. What was the first game you worked on for Acme, and how did the experience go?

It was a game based on Ex Mutants, a comic that I actually hadn't heard of. Bob Jacob was friends with Scott Rosenberg of Malibu, and they had been talking about turning some of the comics into videogames. We thought Ex Mutants had potential to make a good side-scrolling action/platform game, so we began discussing ideas straight away. Everything was close to the wire, all the time, every day, and there was a brutal crunch at the end. I think the design captured the overall story pretty well, and the Mega Drive is probably my all time favourite console to develop on. So I was one lucky programmer, programming in a language I loved, on a console I adored, in a place that blew my tiny, small town English mind. While I was Acme I also worked on another movie adaptation, Cliffhanger.

What was it like working on the ill-fated Mega-CD format with Batman Returns?

Programmers are weird because they love and hate new hardware. On one hand, it gives us new toys to play with and new ways to do cool stuff. But on the other hand, it's a pain in the ass learning new stuff and new ways to do things. As to the Sega CD... it was a clunky piece of kit, basically a Mega Drive with a couple new chips and a CD-ROM bolted on. I only had to deal with the CD-ROM subsystem, which was enough itself to make a grown programmer cry, which actually I'm sure I did towards the end of that project.

Given the cultural shift, what was it like working at Malibu?

Profoundly different to working in England. In addition to the nonstop glorious weather, people were happy and optimistic and I loved that [Acme] was full of Brits back then, most of them luminaries from the UK game industry like Mike Lamb, Steve Hughes, Steve Thomson and John Brandwood. It was a very energetic and friendly working atmosphere, and a lot of really cool stuff got made. We all socialised after work, too, and took it in turns throwing epic house parties.

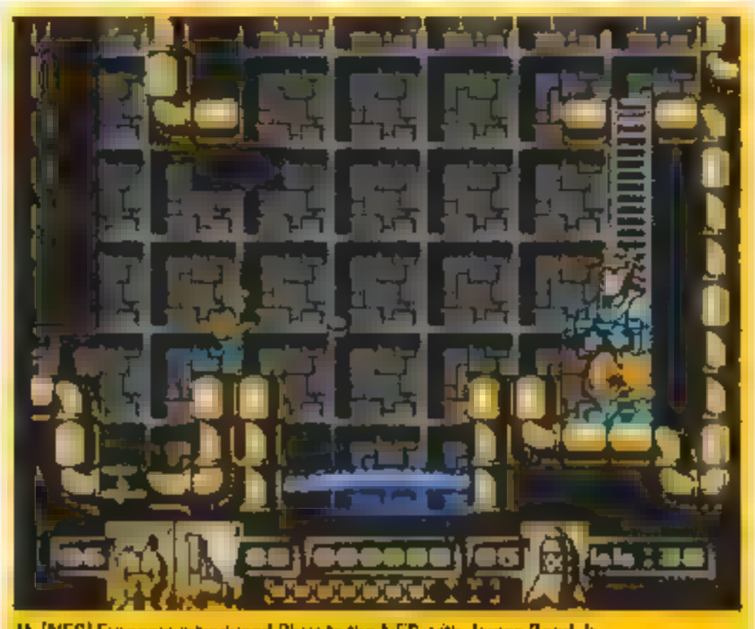
» [Mega Drive] Movie conversion Cliffhanger was one of Chris' Acme projects.

Awesome! But Malibu Interactive was short lived and by its closure you'd already left?

Yes, and I did a quick freelance project for Western Technologies, working on the Mega Drive Spider-man game. That whole gig was pretty wild actually, because they were known for making the Vectrex, and I actually interviewed and met the man himself, Jay Smith. Then, mid 1994, I joined Disney Software before working at VRTO/Interplay, Mass Media, and then back to Disney in 2008.

Interestingly, at Mass Media, you did work porting a number of 16-bit classics to the Game Boy Advance?

We ported three games at the same time, Blackthorne, Rock 'N' Roll Racing and The Lost Vikings. We wrote a macro language for the 65816 assembly language and ran all the original SNES source files through a converter that spat out strange, C macro versions of them that would build for the



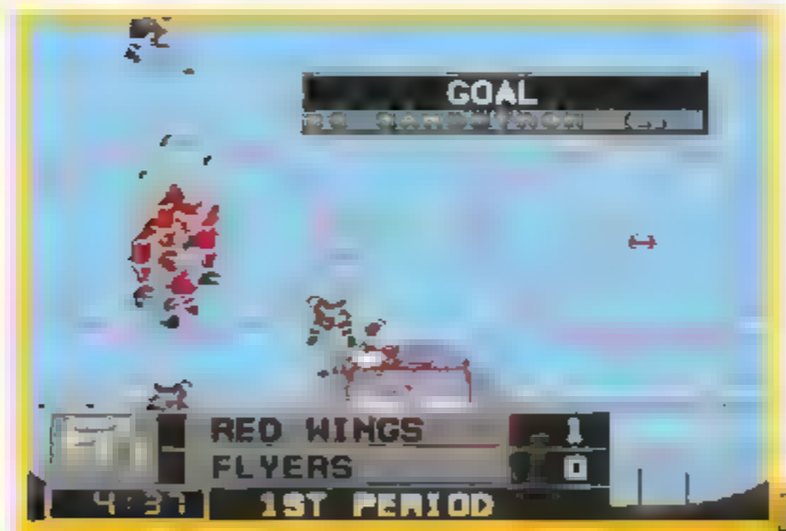
» [NES] Eurocom introduced Chris to the NES with James Bond Jr.

GBA t was rea ly neat and coo , and wonderfu ly overcomp cated, but it did enab e us to port a three games simultaneously and have them run and play a most exactly as the SNES versions t was a fun project overa , but Mass Media . that was an interesting place

What? You can't leave it at that! Tell us more!
Ha joined n 1998, and eft n 2008 you don t get that sort of time for murder t was one of the toughest jobs 've ever had, with every project being a hard port or a broken project from some other stud o that coud n't fin sh it We were a chop shop and did fire-f ght ng projects, and everyone who worked there was a gnarly old pro t was completely uncreative and brutal, nonstop, a the time hated it.

Crikey
But on the p us side, the peop e were br ant, the pay was good and earned a ot

A cloud with three silver linings. We can imagine a PS2 port of the acclaimed Xbox title Metal Arms: Glitch In The System wasn't exactly a walk in the park, either.
Going from an Xbox to PlayStation 2 was quite a magic trick did general coding on that project,



» [Mega Drive] A late Mega Drive game, NHL 98.

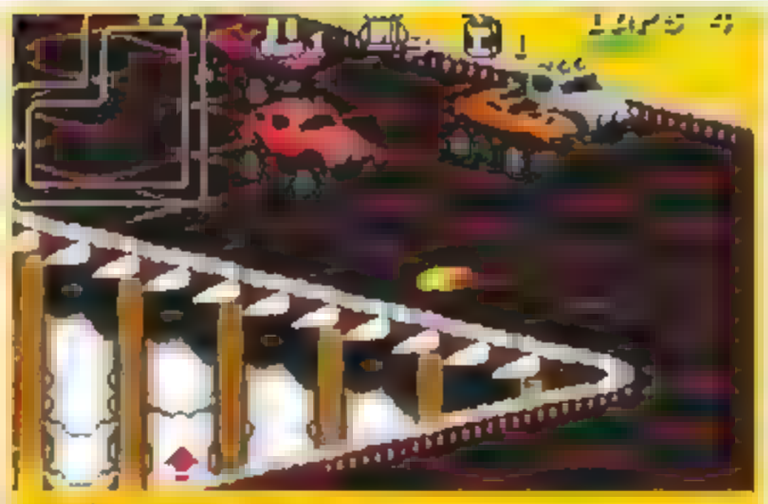
scramb ng around the codebase, fix ng stuff up and opt mising My main task was audio, and built a too chain that took the orig na Xbox XACT audio stuff and munged it into VAGs and data that our interna engine could use spend months wearing earphones, tweak ng the 3D audio and tools to get as close as possible to the orig na game

Anything else of interest at Mass Media?
They picked up conversion projects to port the Ful Spectrum Warrior and Ten Hammers games from Xbox to PlayStation 2. Porting the impossible was our specia ty, remember? Actua ly, both of those were fun projects, though, with a ot of creative so utions to some tough techn ca problems Aga n my main task was audio, s mply because had the tools pipe ne 'd bu t for Meta Arms the year before, but porting to the PS2 from Xbox was very hard because of the differences in architecture and power between the two machines

Then, in 2008, the 'fun' at Mass Media finally broke you What happened?
was working on a game ca ed Tetris Evo ution, which finished in 2007 After that, had a nervous breakdown, and was very for about a year t was a terrible and ong project which had me work ng crunch for a most six months straight at the end, and literal y almost ki ed me When felt wel enough, quit, and joined Disney VR Stud os as their senior community systems deve oper, which was a big change

What was your new role at Disney?
ranged far and wide there, bu d ng technology for the r MMO games ke Pirates Of The Caribbean and Toontown plus esoteric stuff ke a to-moderation and safe chat for k ds, from wh ch got a couple of patents, which was cool After a couple of years made the jump into management and became the

» [PS2] The wonderful Metal Arms, ably converted to the PS2 with help from Chris at Mass Media


» GBA] Mass Media specialised in conversions such as this SNES-to-GBA port of Rock 'N' Roll Racing.

technology ead for Toontown On ne, runn ng the dev teams for the MMO games and the other various properties t was very d fferent to coding and making tech, and cha enging at f rst, but soon discovered the joys of de egating work and team-bu d ng, and decided it was definitely my bag got promoted to director of technology, games systems, and moved on to a new MMO project that unfortunately never saw the ght of day, and overa was there for s x years before 'retired' in 2014 and started contracting and mak ng my own games

As you mentioned, you are still making games today, but how has the industry changed for you since that first game you made back in the early Eighties?
The mechan cs of game dev rema n fa rly unchanged You start with an idea, design it, then bu d it and fina ly, se it The process is the same, but has become very soph sticated, with the broad strokes broken down into hundreds of processes and disciplines, ayers of complexity and structures, with more at stake But under a those new ayers and processes, it's st the same chaotic mess of creative people and drama But as a whole, the industry has changed a ot, as anything w over 35 years especia y when it's based on technology Today there's a ot of serious money at play, and with that comes expectation, and that means opt m se the machine as much as poss ble to max m se profits The innocence eft the games business pretty quickly back in the day but now the sou has gone, too, as everyth ng s measured and tested and designed based on business inte igence and data Meanwhile games have been devalued to the point they can't be given away by huge companies know th s sounds cynica , but acknowledge there are st incredible

> "The Mega Drive was lovely and 'airy' – meaning the hardware felt somehow boundless at the time"
> Chris Shrigley

» [PC] One of Chris' projects at Disney, an online imagining of Pirates Of The Caribbean.

» [C64] Bounder was extremely popular on home computer formats and was followed by a sequel in 1987

things being made by indies and studios bold or rich enough to take risks. Sorry, but you did ask!

No problem! You mentioned the Eighties – this was where your career started, so how do you remember that time?

They were my heyday. I was young and indestructible, and thought I owned the world. There was a certain freedom in making games back then that made it seemed perfect – I had a job that allowed me to make cool stuff with cool people, and gave me money to do all the important stuff a 19-year-old needs to do like drinking, partying and buying your mum new furniture. It was an amazing experience and I feel lucky to have been there and done that.

Having said that, your favourite system was a certain popular console from Sega?

The Mega Drive was lovely and 'arty' – meaning the hardware felt somehow boundless at the time, coming from 8-bit. It was simple, yet powerful, and just felt comfortable – and 68000 assembly language was also a revelation after working on the C64 and NES. So many registers and sexy ways to move data around.

Okay that's the best – what about the worst format you worked on?

Probably the Sunplus SPG which is used a lot in those plug-and-play TV games – I made a game called Bratz: Maths In The Mall which was a big pair of plastic lips that plugged into your TV and let you play a handful of 'girl games'. It was a short and awkward project with a very basic development system, a bare board with peripherals attached.

Which of your games are you most proud of?

I think my current game, Immortal Darkness, is the one I'm most proud of. After having spent a long time making games for other people and a few for myself, I finally got to make the game I've always wanted to make. I didn't compromise anything personally on the coding side, or any of the other things I was responsible for. It was an exercise in creation and control, and it turned out good. Otherwise, Bounder because it was my first game and got me into the business, and Footballer Of The Year because it was the first real commercial game I made all by myself.

And not so proud of?

None. All my games are part of the rich fabric of my career. Haha! Who am I kidding? There are a few. Possibly Saint And Greavsie Football Trivia Challenge on the C64 or Toy Story Daytona Racing on the PC. Or how about Bart Simpson Skateboarding? Definitely one or two horror show projects there.

You don't strike us as being a man to harbour regrets. Right?

Yep. Life is short, and mostly a chaotic ride into the unknown. You can't hold on to regrets for missteps or opportunities lost or missed. There have been plenty of those, but just as many incredible experiences. So no, no regrets.

What period of your career do you look back on with the most fondness?

I think the early days of Gremlin were my favourite times spend doing this thing. There were problems and drama, but it really was amazing. The combination of opportunity and youth was a one-off, and getting to work with amazing talent and make really cool stuff and just do very, very silly things was the best.

Finally, tell us more about your current work?

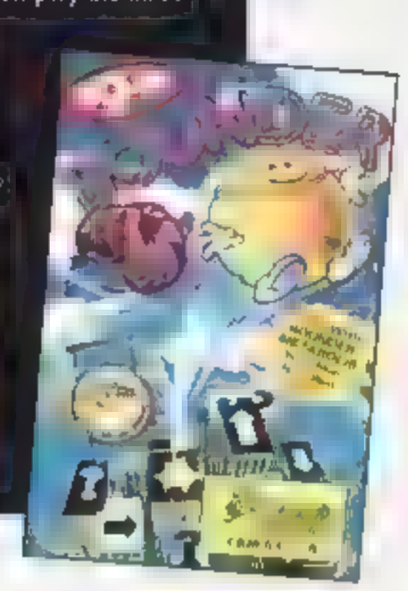
My main focus today is the game studio I run called Giant Space Monster. We released our first game a few months ago – Immortal Darkness: Curse Of The Pale King – and maintaining the game, marketing and selling it pretty much consumes most of my time.

Immortal Darkness, an old-school dungeon crawler, is available now on PC via Steam. Check outimmortaldarkness.com for more information.

B-B-BOUND TO BE A HIT!

The three friends who made a mega 8-bit hit

In a classic case of bedroom coders finding their feet, one summer in the Eighties, three pals, Chris, Andrew Green and Robert Toone sat in a park and came up with the idea of *Bounder*. "I'd been playing around with scrolling techniques on the C64, trying to emulate the arcade game's parallax scroll, and I'd pretty much figured it out," Chris told **Retro Gamer** way back in issue 58. The game was *Exed Exes*, a favourite of the trio. The lads began to throw around ideas before Chris suggested a tennis ball rolling around in a *Marble Madness*-style environment. After much discussion, the bouncing ball dynamic and top-down view of *Bounder* was realised along with the idea of platforms and traps. The effort impressed Gremlin boss Ian Stewart enough to not only commission the game but also employ the three men. "We were blown away – this was beyond anything we expected," remembered Chris. "We were living a dream and would have been happy had the game done nothing, because we were working for Gremlin and earning a wage making games." *Bounder* was a huge hit, setting Chris Shrigley on the road to a games career that continues today.



Croc: Legend Of The Gobbos

'THEY HADN'T HAD SO MUCH FUN SINCE THE YEAR OF THE THREE MINUTE EGG TIMER'

» PLAYSTATION » 1997 » ARGONAUT GAMES

Pfft, who reads the manual? 'm sure m not the only one here who almost never reads a game's instruction book helped Croc rescue his furry Gobbo friends for hours and hours as a kid and never once pulled the booklet from the front of ts case should have, though turns out t's hilarious!

recently flicked through the manual of Croc Legend Of The Gobbos and discovered its rather silly introduction, where we earn the answers to burning questions like, 'Who were the Gobbos?' and 'How does the Gobbo calendar work?' Well the Gobbos are a simple people, a race whose greatest inventions were edible deodorant and the Wind Powered Cow Moistener And that at the start of each year, the Gobbo high priestess would announce the kitchen utensil that, when put down their pants, would bring good luck Gobbos took this very seriously, although some began to question the practice during the Year Of The Electric Can Opener bet you don't get that sort of insight n Super Mario 64 s manual

'm sure Croc's entire backstory wi be covered in greater depth next time Croc or Choo Choo McBoogie, as some Gobbos know him by graces the pages and presumably the cover, of **Retro Gamer**

RETRORATED

>> Nick faces the horrors of Capcom's Resident Evil 2 remake this month, Darran takes it easy and simply plays Out Run while Sam and Drew get their Wargroove on

[PS4] Now that it's right in your face, the Licker is capable of inducing very real panic

Resident Evil 2

"SO... THIS IS WHAT EVERYONE'S BEEN DYING FOR..."

INFORMATION

- **FEATURED SYSTEM:** PS4
- **ALSO ON:** XBOX ONE, PC
- **RELEASED:** OUT NOW
- **PRICE:** £39.99
- **PUBLISHER:** CAPCOM
- **DEVELOPER:** CAPCOM
- **PLAYERS:** 1

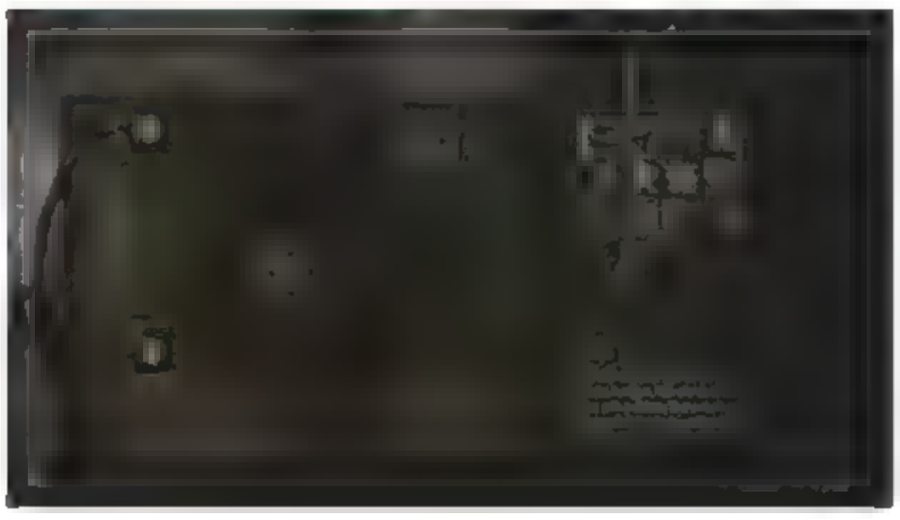
Back in 1996, some irresponsible person decided it was okay to supply an 18-rated zombie film for a nine-year-old's Halloween party. Ever since then, I've had a bit of a zombie phobia, yet I was able to write last month's feature on the original Resident Evil 2 with nary a yelp of surprise. It was too familiar. It didn't scare me. As a result, I agreed to review this remake, thinking that it wouldn't be too bad to cover well-trodden, though still blood-soaked ground. Dear readers, I am an idiot. The new version of Resident Evil 2 is a magnificent game, and I have hated every second of it.

The brilliance of this remake is that Capcom has made Resident Evil 2 scary again, even for those of us familiar with the original game. In part, that's just a product of improved artistic design and technological improvements. The surprisingly functional Raccoon Police Department of 1998 is no more. The main hall now looks like the site of a rescue operation, strewn with beds and first aid gear. You'll need to explore the hallways by torchlight, because most of the lights are out, and every bit of shadow cast by that torchlight looks amazing, such is the level of graphical detail. Zombies visibly deteriorate as you shoot them – police hats go flying, limbs drop off and hinder enemy movement appropriately, and heads explode. Capcom has allocated serious resources to this game and it shows.

But it's also a product of clever design, as Capcom has made sufficient changes to keep the experience fresh, while retaining enough of the original design that it can play on your familiarity. The maps and puzzles have all been adjusted – the game doesn't even start on the streets of Raccoon City anymore. But as ever, the mutated monstrosities are the stars of the show. Zombies will smash through the windows if you fail to board them up, and follow you between rooms. The first Licker encounter is still terrifying, but there's an unexpected twist. But it's the way the Tyrant has been altered that is truly inspired – once you get to a certain point it begins to

Launching in 1998, following a extended development period where work on the game was scrapped and restarted, Resident Evil 2 quickly found critical acclaim. The game followed protaganists Leon S Kennedy and Claire Redfield as they attempted to escape the zombie-ridden Raccoon City. Much like Capcom's remake of the original Resident Evil, this reimaging should feel both fresh and familiar

PS4 – It wouldn't be Resi without the puzzles, but they're not quite as prominent as in 1998



PICKS OF THE MONTH

DARRAN

Sega Ages: Out Run

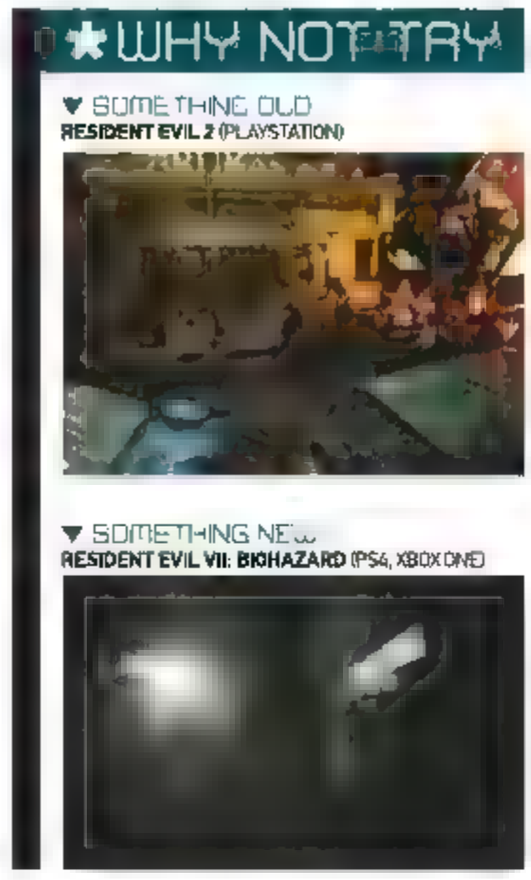
It's lost the 3D effect that made the 3DS version so thrilling to play, but M2's adaptation for the Switch is still worthy of your time

NICK

Catherine Classic

I loved Catherine the first time around and while Resident Evil 2 is actually better, this didn't nearly give me a heart attack

» [PS4] If you're squeamish about gore, just avoid this game – this exploding head is relatively tame



» [PS4] Secondary weapons like the combat knife are useful when attacked – even by brutes like William Birkin

stalk you around the station, with the sound of its footsteps the only clue of an impending random assault. Knowing that you're constantly under threat of attack from a uniquely powerful enemy is incredibly stressful, to the point that Capcom may as well just skip remaking Resident Evil 3 – it's hard to imagine they'd make Nemesis scarier.

There are some key improvements that make the whole experience smoother. The map's distinction between visited, unfinished and fully explored areas is very helpful – as is the way key puzzles are marked down – items you've not collected are also pinpointed for you – it was also nice that the puzzles weren't quite so obtuse this time around, though you may not feel the same. Your objective is always clear, too, so even if you're loading up a save after a lengthy break, you'll be able to jump right back into the action.

You'll probably get through the first story in Resident Evil 2 in ten hours or less, but there's a second scenario to unlock as well as plenty of bonus content. As you'd expect, the plot broadly follows the same outline as the original, though character designs have evolved a bit. Ada Wong is the most notable example of this, now dressed somewhat more appropriately for her situation when you meet her. The voice acting is improved over the original game, and the script is better too. But while they have improved, it's fair to say the improvements are spread unevenly. Some scenes in Resident Evil 2 are convincing, such as when Marvin Branagh warns you about the zombified cops, but others are up there with the cheesiest of Hollywood films – and one particular scene with Leon and Claire verges on Shaun Of The Dead, but without any knowing wink at the camera.

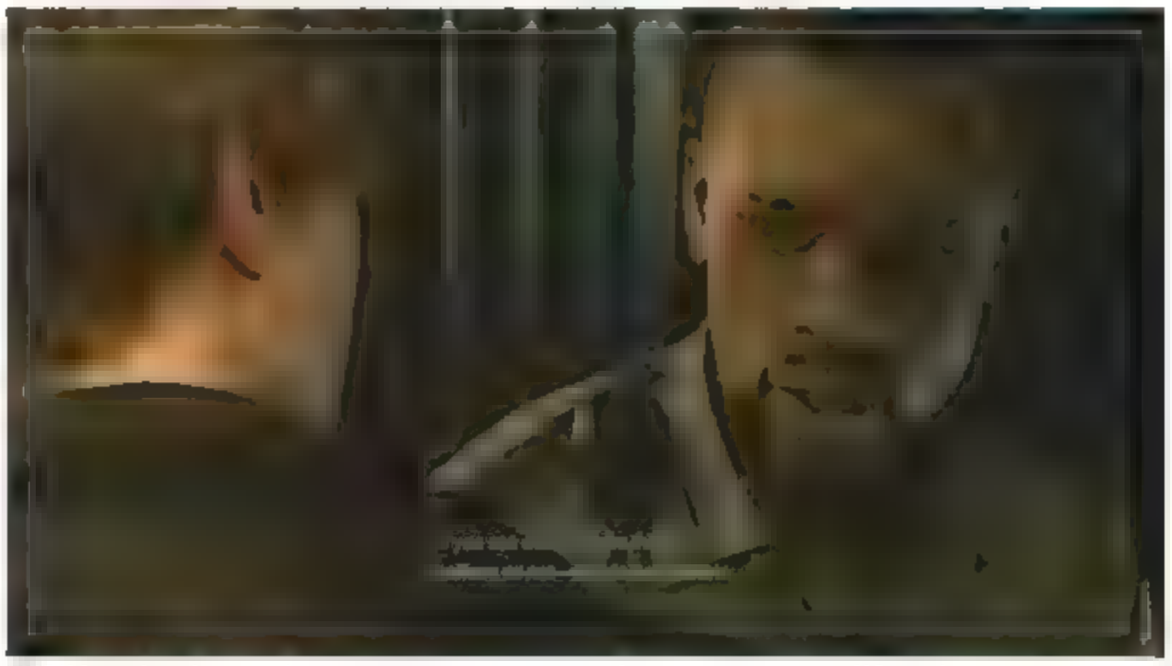
There are a couple more niggling, tiny complaints keeping this from perfection. Firstly, though the length of the game is perfectly pitched to be both satisfyingly substantial but inviting to replay, it's sad that the opening run through the streets of Raccoon City has been shortened considerably to achieve that. Secondly, it's almost too detailed. The game is clearly pushing the limits of what the current consoles can achieve. We like the 60 frames per second target but the standard PS4 does struggle with it, and though this was rarely much of a bother, it's a shame that there's no option to lock the framerate to a solid 30fps. This shouldn't be an issue on PS4 Pro, Xbox One X or a strong PC though.

While I'm personally glad to see the back of it – I've experienced a year's worth of stress in a month – there's no denying that Resident Evil 2 is excellent. It does justice to the original game, standing next to the GameCube remake of the original Resident Evil as a shining example of how to remake a videogame. It's also a thoroughly modern gaming experience, with compelling design that will keep you hooked to the end and beyond. But above all else, it inspires fear just like it's supposed to. ✱

In a nutshell

It's arguably the best classic Resident Evil plot and setting, perfectly adapted to modern design conventions. Whether you're a newcomer or a veteran, you should play this game if you have any interest in survival horror.

» Score **92%**



» [PS4] Secondary characters have had their roles changed somewhat – you see a lot more of Marvin, for example

RETRO ROUNDUP

WE LOOK AT THE LATEST RETRO-RELATED RELEASES

PICK OF THE MONTH

Wargroove

» **System:** Switch (tested), PC, Xbox One » **Buy it from:** Online » **Buy it for:** £16

Chucklefish has a deft hand for reviving an old game series in everything but name. In recent times it's taken to revive the action RPG thrills made famous in Symphony Of The Night with Timespinner, and pay homage to Neo-Geo Pocket brawlers with Pocket Rumble. For this latest reinvention, Wargroove, the commanders at the indie developer/publisher have set their eyes on Intelligent Systems' Advance Wars.

Wargroove is not a carbon copy though as the most obvious difference between the two is the setting. Wargroove adopts a medieval fantasy setting and follows Queen Mercia on her quest to reclaim her country following an invasion of a vampiric nation. The differences extend to the game's design, too commanders themselves join the fray, and you can restore units' health at captured buildings, among other things.

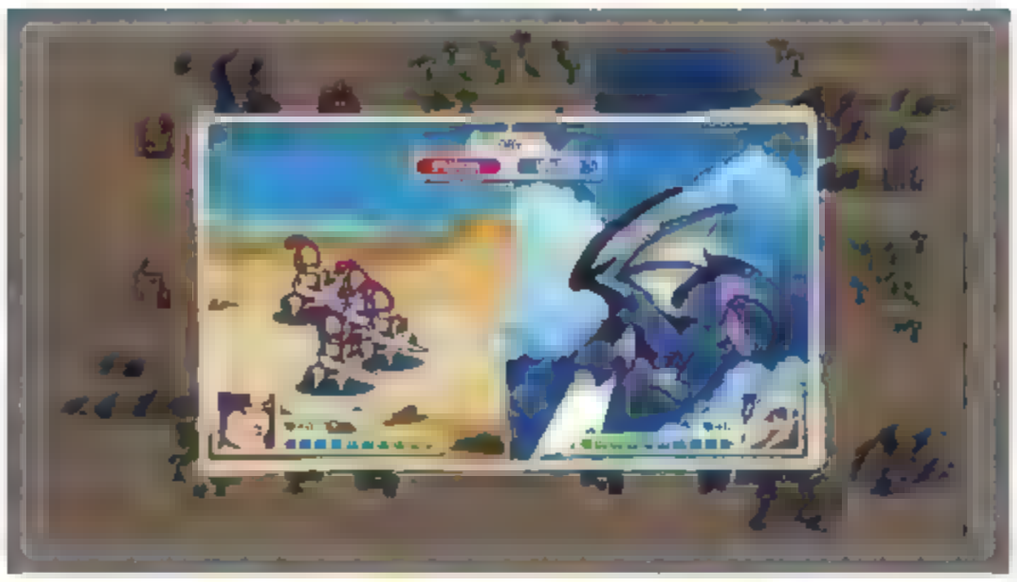
It's clear a lot of care and attention has gone into Wargroove. It's a delightful strategy game with gorgeous pixel art animation and in-depth systems that will feel instantly familiar to Advance Wars fans. The story is pretty good, too. We found ourselves caring for Mercia's plight, and her canine commander Ceasar is a character we pretty much instantly fell in love with.

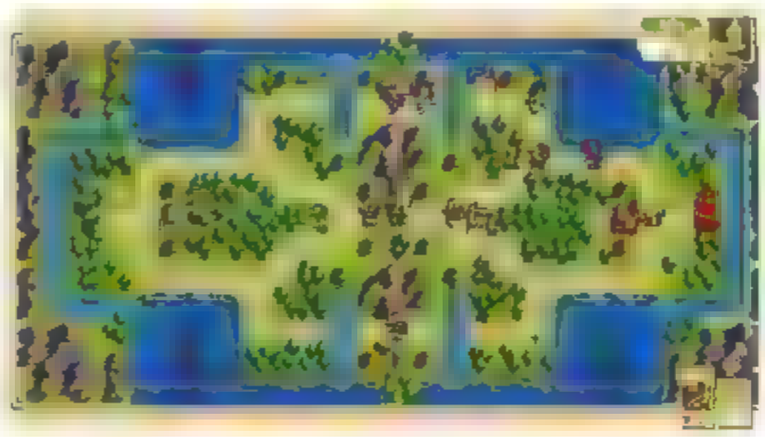
No game is without its flaws, however, and Wargroove has a couple of small bugbears. While we enjoyed the minute-to-minute action, some missions in the campaign can feel overlong. If the enemy gets a chance to regularly deploy units early on, you'll be staring down at least a 40-minute skirmish. The difficulty spikes pretty severely early on in the game, too – however, if that's a problem, you can switch to an easier mode in the menu.

At the time of going to press, Chucklefish has detailed a patch solving more of the minor issues surrounding the game – skipping battle scenes quicker, for example, and making key battle information easier to find – so it's clear the developer is invested in the game's future.

Wargroove is great, and should definitely appeal to anyone wanting a new Advance Wars, or fans of strategy games in general.

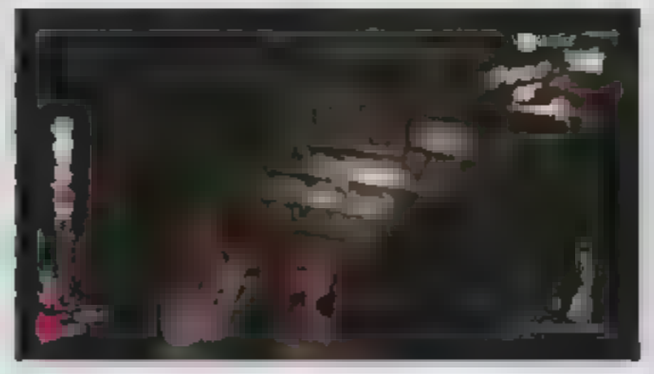
» Score **85%**





» [Switch] The battle screens are gorgeously well animated.

» [Switch] You have to consider a lot in battle such as capturing buildings and harnessing the terrain.



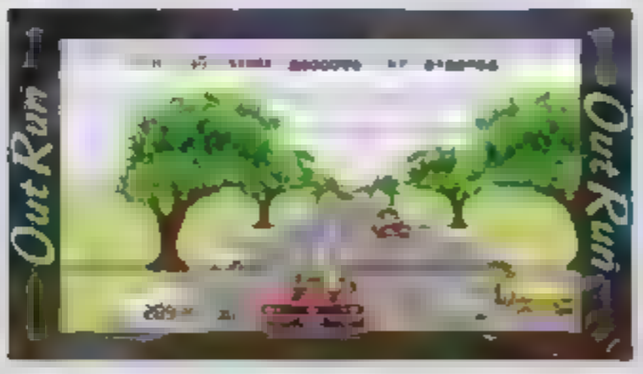
Catherine Classic

» **System:** PC » **Buy it from:** Online
» **Buy it for:** £14.99

Pity poor Vincent. By day he's torn between recent one-night stand Catherine and his long-term girlfriend Katherine, with the player managing his relationships with both women and patrons of the Stray Sheep bar. If there's one thing we could all do with during the drama, it's a mandatory life-or-death puzzle haunting our nightmares, and that's the other component of the game. You need to guide Vincent up dangerous towers, pushing and pulling blocks to create a path to the goal.

This new PC version doesn't change much but adds Japanese voices. The great shame is that the awkward control scheme remains – other than that, both the puzzle and social simulation remain fun after eight years.

» Score **80%**



Sega Ages: Out Run

» **System:** Switch » **Buy it from:** eShop
» **Buy it for:** £5.99

If you experienced M2's rather brilliant update of Sega's hit arcade racer on 3DS this new version will feel extremely familiar. It's effectively exactly the same game, meaning there's an option to play at 60 frames per second, additional music tracks, a mind-boggling amount of customisable options and enhanced cars (to unlock as you complete each of the five routes). Obviously the superb 3D effect is no longer available, but there are four brand-new music tracks, three of which are from past versions of the game, and a snazzy remix that includes all three original arcade tracks. Add in an extremely good price point, as well as the option to play on a TV as well as on the go, and M2's latest update becomes very hard to turn down.

» Score **88%**

Onimusha Warlords

» **System:** Switch (tested) PS4, Xbox One, PC
» **Buy it from:** Online » **Buy it for:** £15.99

Considering the original PS2 game is nearly two decades old, Capcom's game holds up surprisingly well. The combat is nice and fluid, there are some satisfying bosses to battle and it has a half-decent story, too. Some aspects of Onimusha haven't stood the test of time however, including weak puzzle design and those clunky tank-like controls that were part and parcel of Capcom's survival horror titles during the period. Oh and the voice acting remains laughably terrible. It's also somewhat disappointing that Capcom chose not to revisit the superior Xbox conversion. Still it's an entertaining game and playing it on the go is a nice touch, but ultimately this is just a quick and easy port of an early PlayStation 2 game and nothing more.

» Score **70%**

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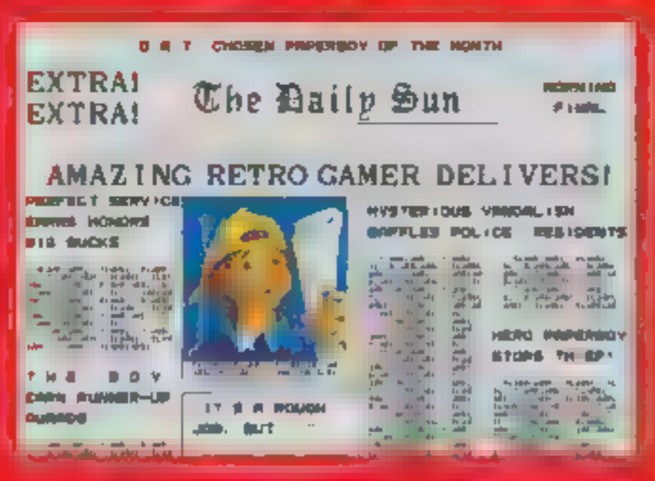

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Gamer's HOMEBREW

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[C64] One button running and jumping with 16K cartridge game C64anabalt

NEWS

[PC] The going gets heavier in Fishy Rescue as the zeppelin takes on passengers.

[PC] Total Party Killers players use their friends to get ahead

A LITTLE FISHY

The majority of humanity finds itself trapped within force field-protected cities after the Earth is invaded by evil alien fish who steal all of their weapons. A few poor souls are stuck in the bad lands, though, and they need airlifting to safety by zeppelin except some of them will need to be sacrificed for the greater good, used as projectiles to destroy barriers and armed fish sentries. This surreal future is the backstory of Fishy Rescue, one entry in the most recent Ludum Dare game jam which was based around a theme of 'sacrifices must be made'.

That theme could be interpreted in a number of ways and that's pretty much what happened, with several puzzlers including RespawnBot, Total Party Killer or Send In The Clowns all built around the idea of literally throwing bodies at the problem until it's solved. At the more extreme end of the scale, we have titles like Zeus Needs Omelettes where the ruler of Eggliandia must surreptitiously offer up his subjects for breakfast while trying to avoid being caught by the remaining populace – think Dizzy but with questionable religious ceremonies and a Holy Frying Pan – and Jesus Take The Wheel sees the titular religious leader taking centre stage while trying to keep absentminded motorists out of harm's way.

One developer even felt that entering the game jam itself involved major sacrifices, so they made a game about that – it's rather unsurprisingly called Game Jam Simulator – so players can experience the process for themselves, sometimes having to lose features from their project to get it finished. As is always the case with the Ludum Dare events, there's a huge number of entries to wade through behind the link at Kickstart.me.uk/ludum-dare-43, and most readers should find something to entertain them.

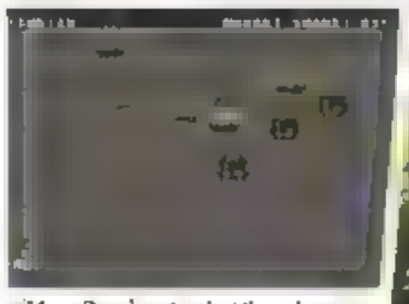
Another event that was recently launched is RGCD's 16K Cartridge Game Dev Compo. This competition first ran in 2011 and has been resting for the last couple of years, but the latest iteration was launched just before Christmas 2018 with the deadline for entries being the end of June. As the name suggests, submitted games have to fit into the ROM of a 16K cartridge and previous entries have included some excellent titles like C64anabalt, Aviator Arcade, Rocket Smash and Micro Hexagon. We're looking forward to seeing what the C64 coding community produces this time and further information is available over at Kickstart.me.uk/rgcd2019.

NEW GAMES NEEDED

If you have a homebrew project you would like to see featured then please contact us at: **retrogamer@futurenet.com**

HOMEBREW HEROES

Dr Ludos has come up with some fantastic game scenarios in the past, so we couldn't resist asking him about the story behind his most recent outing for the Mega Drive called 30 Years Of Nintendon't



» [Mega Drive] Just look at those beaming new Mega Drive owners

You have a flair for creating unusual game designs, where did this originate?
Thanks! As a kid who grew up in the Eighties and Nineties, was fully involved in the console wars between Nintendo and Sega. At the time I was a Nintendo kid but my best friend had a Mega Drive, so I was lucky enough to enjoy the best games of both sides. Like many retro gamers, I'm also a big fan of the Sega adverts, especially the JS ones and their infamous tagline 'Genesis does what Nintendon't!' To me, this is the best videogame ad ever created. So it was my main inspiration to celebrate the 30 years of the Mega Drive.

How hard was it to implement on the Mega Drive?
It was my first Mega Drive game, but I had experience of making homebrews using C-based SDKs on others consoles (GB, SNES). So I choose to use SGDK, the reference toolset to create games on the Mega Drive in the C programming language. I think it's one of the best, if not the best, SDK available to ease the creation of homebrews. Besides a robust compiler and well-designed API, it comes with handy tools to convert graphics and audio files from modern formats into the Mega Drive native format.

It also comes with a powerful sprite engine allowing you to display many animated sprites on-screen quite easily. For someone wishing to make homebrews, I definitively recommend to pick the Mega Drive and SGDK and the starting point.

How have Mega Drive owners reacted to the game, and have you heard from any NES fans?
As expected, Mega Drive fans seemed to enjoy the game. My favourite feedback is someone who said, 'Thanks for the dedication to the cause. Keep up the good work.' NES fans enjoyed it, too, and took it with humour. For example, another player said: 'Hmm, I'm stuck. None of the suggested games are better than SMB3 or Contra. What can I do to proceed?' Honestly, now that we are all grown-ups we usually acknowledge that both Sega and Nintendo consoles had great exclusive games.

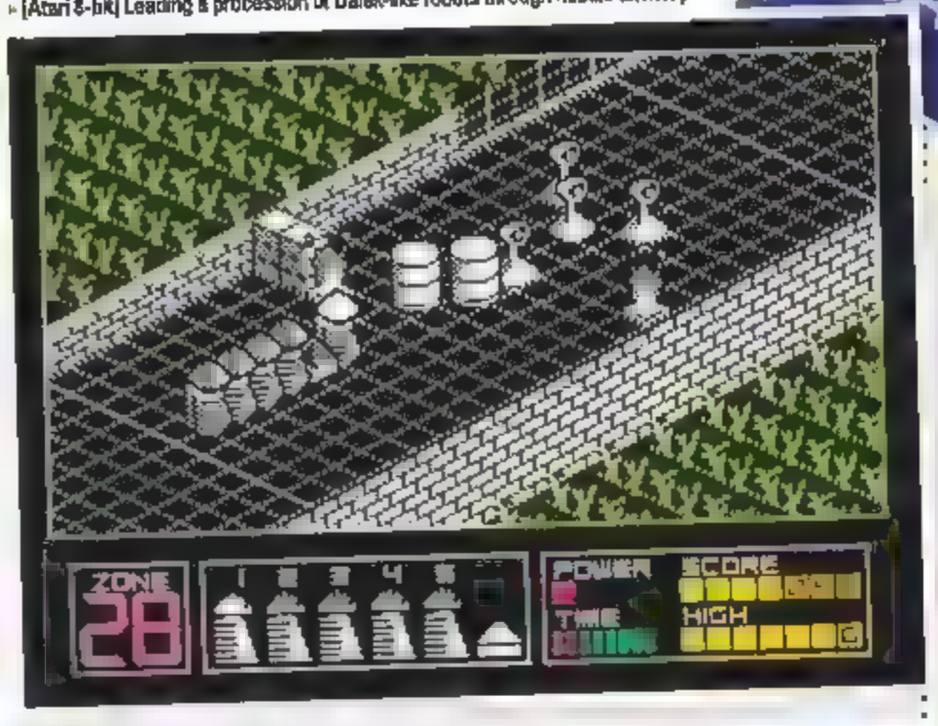
I hope players enjoyed going back to the Nineties for a few minutes when you had to choose a side. Because to me the console wars will always be part of console history.

Is there anything you would have done differently?
It's a simple game made to celebrate the Mega Drive, so I'm 100 per cent happy that I've been to create and release it on the actual 30th birthday date: 29 October 2018.

Finally, are there any future projects in the works?
Yes, I have been working on a two-player arcade shooter for the SNES for about a year now. The software part of the game in complete, and we are currently working on the hardware side with Catskul Games. I'm also toying with the idea to make a Neo-Geo version of this game, to be able to play it on an actual cabinet. I also have others Game Boy and Mega Drive games in the work, as both consoles are a real pleasure to work on!

» [Mega Drive] So, do you like a little monkeying around or vectors?

» [Atari 8-bit] Leading a procession of Dalek-like robots through hostile territory.



WHERE'S HARRY SECOMBE?

Janusz Chabowski has pulled Vortex Software's Spectrum release Highway Encounter apart and explained to all why running it on the Atari 8-bits would be a good thing. The game is a shoot 'em up with high-resolution, isometric 3D graphics and the player controls five Vortron robots which are travelling the one remaining road to the heart of an alien invasion.

Their plan is to drop off a Lasertron which will end the war once and for all by blowing everything within its blast radius to smithereens. The road to Zone Zero starts off at Kikstart.me.uk/highway-a8.

» [Atari 8-bit] This invasion from the underworld is only running a skeleton staff

IN HIGH SPIRITS

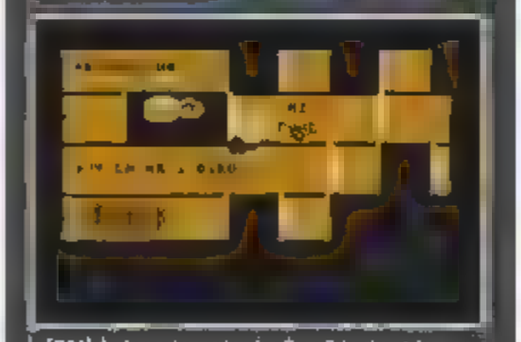
Druidarium on the Atari 8-bit is an action game where a druid explores the scrolling landscape in search of important artefacts while magically blasting bats, skeletons and other eerie attackers. There's a lot to explore as well, with the action beginning around and under an ancient stone circle before heading over to the nearby village.

At the time of writing this one is still a work in progress, but we've given the preview version available from Kickstart.me.uk/druidarium-a8 a quick spin and it does seem to be coming along nicely.

DO YOU REMEMBER?

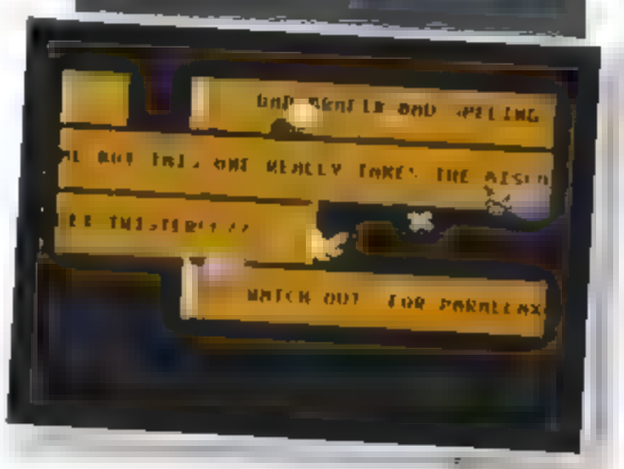
Uridibad was developed by Sensible Software – the people behind 8-bit and 16-bit classics including Wizball on the C64 and Sensible Soccer for the Amiga – during its early days and uploaded to the C64 centric online service Compunet for subscribers to download.

That probably explains why the scrolling dreadnought is covered with graffiti, which greets passing friends and plugs their other works including Galax-I-Birds. It isn't a complete game in the sense that the player can't actually die – we've previously asked Jon Hare about this, and there were further plans for Uridibad which never came to fruition – but there's still some cathartic fun to be had hammering around the scrolling landscape while enemies run into your bullets. It's also an early landmark in Sensible's history so worth exploring for that reason. Kikstart.me.uk/uridibad-c64 will take you there.



» [C64] A shameless plug for Sensible shoot-'em-up Galax-I-Birds glides past in the background

» [C64] It looks like someone has been playing Dreadnoughts and crosses.



DIGILOI

PLATFORM: C64 AND PLUS/4 • **DEVELOPER:** TERO HEIKKINEN **DOWNLOAD:** KIKSTART.ME.UK/DIGILOI-264 AND KIKSTART.ME.UK/DIGILOI-C64 **PRICE:** FREE

Among the many lessons that dystopian science fiction has taught us over the years is that whenever someone decides to create some form of autonomous defence system, it invariably ends up either being repurposed for nefarious means or becomes sentient and decides that the world would be a lot better off without the people who live on it.

In the case of Digiloi it's the latter and the only way to stop the potential carnage is to disable the Master Computer by finding the three emergency shutdown disks and inserting them into its mainframe. Saving the world isn't easy and there are both robotic and at least partially organic enemies between those floppies and the computer's disk drive so it's fortunate that our hero remembered to pick up his large bore, handheld plasma cannon on the way out of the house that morning.

The entire mission takes place within a single flip-screen map with most of the screens initially populated by nasties, but all of the enemy types bar one can be blasted. There's no penalty for simply holding the fire button down while running around, either, but a few of the opponents have their own weapons and aren't reluctant about using them so some caution is necessary for long-term survival. The robot crab that bounces around the screen is the assailant that can't be shot, but it'll disappear on contact with the player. That sacrifices a life which can be replaced by opening one of the capsules dotted around the environment, although these are single-use devices and it's wise to save them if possible.

Downed enemies stay that way until being respawned when a disk is either collected or inserted into the Master Computer and reinforcements are added to some of the screens in the process to make them harder to pass, but for players who don't find the standard version of Digiloi to be challenging enough there's also a faster paced version available for the Plus/4.

» [C64] Evil computer-based security systems never allow for lone marines with large guns.

» [Plus/4] Disk two inserted, so time to go searching for the third floppy.

>> Score **86%**

TRONIC KIDS

PLATFORM: AMIGA » PRICE: FREE
DEVELOPER: AMIGA FACTORY
DOWNLOAD: KIKSTART.ME.UK/TRONIC-KIDS-AMIGA

» [Amiga] Enemies stare at walls when the player is on the far side

Tronic Kids is a maze-based game where the player collects treasure chests to unlock the exit and escape their pursuers. There's quite a few enemies roaming the play area to contend with, but the titular kid does have one trick up his sleeve – the ability to drop holes which act as booby traps.

Sadly, the enemy movement is primitive with everybody just trying to head directly towards the player. They get stuck on the far side of walls and stack up on one another until there seems to be just one opponent, at least until they all pass over a hole and only one gets trapped.

With improved controls, some better AI and sanity checks – preferably preventing those nasty moments when enemies unexpectedly spawn right next to the player – this could have been a solid action game, but currently it's rather clunky to play and too just frustrating to be enjoyable.

» Score **45%**

FLIGHT OF PIGARUS

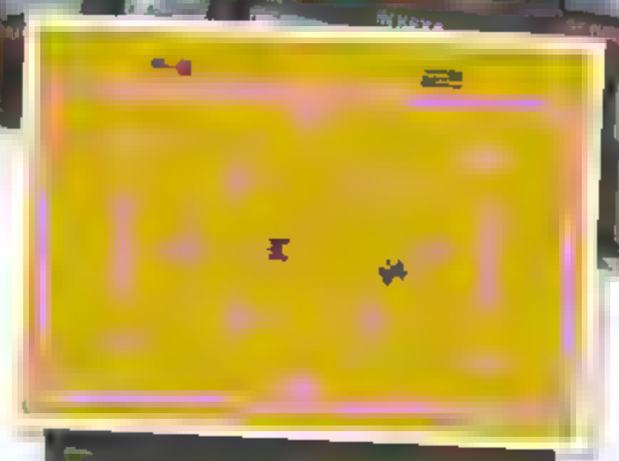
PLATFORM: MASTER SYSTEM DEVELOPER: KAGESAN
DOWNLOAD: KIKSTART.ME.UK/PIGARUS-SMS » PRICE: FREE

They say pigs might fly when something seems unlikely, but every now and then the unexpected happens so one particular pig takes to the skies to destroy the threat to his loved ones while bringing home the bacon by gathering bonuses along the way. Our porcine hero also has to worry about his power level, it starts at two and is increased by power-ups collected during play – more power also equates to better weaponry – but taking a hit reduces it so too many collisions will end the game.

This is a score attack style shoot 'em-up with two and five minute options, with Pigarus racing against the clock to rack up as large a score as possible. Completing either game mode is challenging, but the replay value to Flight Of Pigarus actually comes from learning the attack waves and then going back to top the current high score.

» Score **92%**

» Master System The jewels are worth grabbing but only if it's safe to do so



[redacted]

Anybody who has ever gamed on the Atari 2600 will know the battle game Combat and, after 40 years, it's now possible to sit down with a friend and enjoy the mechanical carnage on the Atari 8-bits too by heading to Kikstart.me.uk/combat-a8.

Pairs of C64 owners can also get in on the tank-based battle of Combat as well since developer SACE has released the appropriately-named Tank Combat – that's parked up at Kikstart.me.uk/tank-combat-c64.

Finally, Dr Wuro's multiplayer battler Frogs has been ported to the Atari ST – which has enhanced some of the power-ups such as the frog-support MIDI connective – and supports MIDI connectivity for old-computer gaming sessions and offers party mode for up to 16 players. Hop to Kikstart.me.uk/frogs-st for a download.

TETRAMINIS DEFFECT

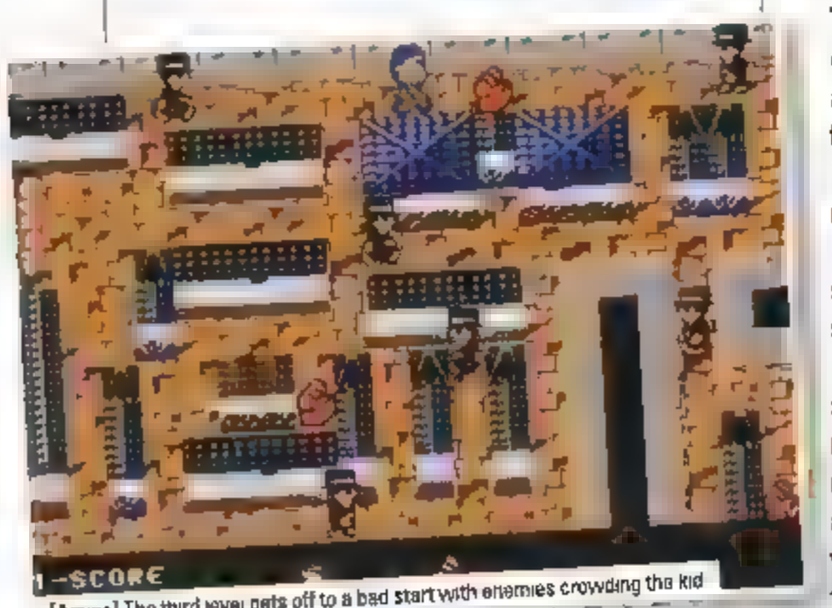
PLATFORM: PICO-8 DEVELOPER: TROMAGON » DOWNLOAD: KIKSTART.ME.UK/TETRAMINIS-PICO8 » PRICE: FREE

Tetraminis Deffect is, as the name hints, a demake of the most recent instalment in the Tetris franchise and, despite the silly name, it's a very good, feature-laden implementation of the classic game. The controls include some aftertouch – shapes can be nudged into corners for a small time after touching down – and there's an indicator which shows where the current shape will settle to makes lining it up with an appropriate space easier.

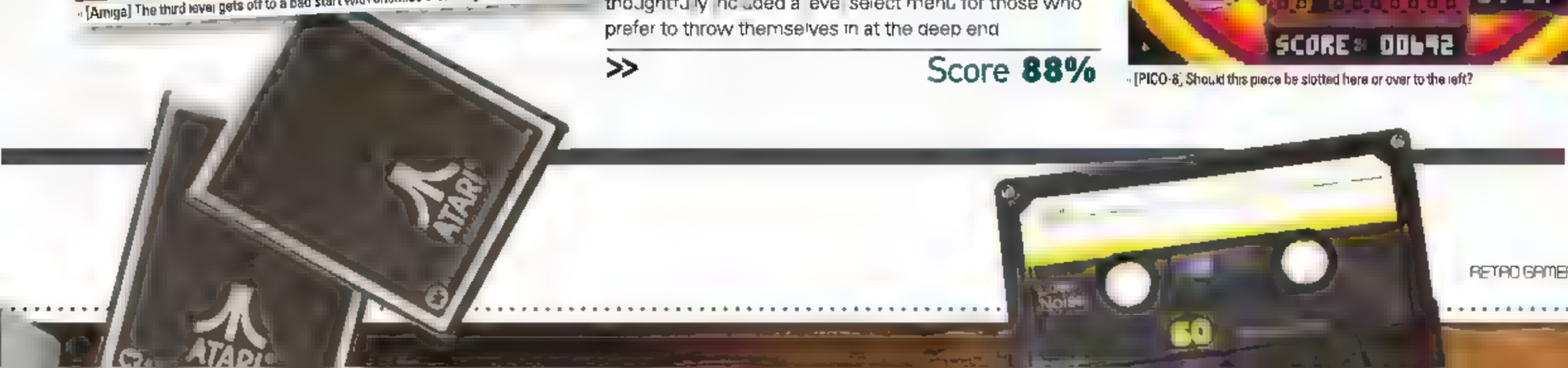
There are swirling, hypnotic patterns filling the free space around the well and some mellow music playing in the background which are both soothing, suiting the initially relaxed pace of the gameplay before becoming a contrast as the action heats up. It does take a little while for that to happen though, so the developer has thoughtfully included a level select menu for those who prefer to throw themselves in at the deep end.

» Score **88%**

» [PICO-8] Should this piece be slotted here or over to the left?



» [Amiga] The third level gets off to a bad start with enemies crowding the kid



DIFFICULTY

●○○○○

LOW

WHAT YOU'LL NEED

- COMPUTER
- PATCHING PROGRAM
- FLASH CARTRIDGE *(OPTIONAL)*

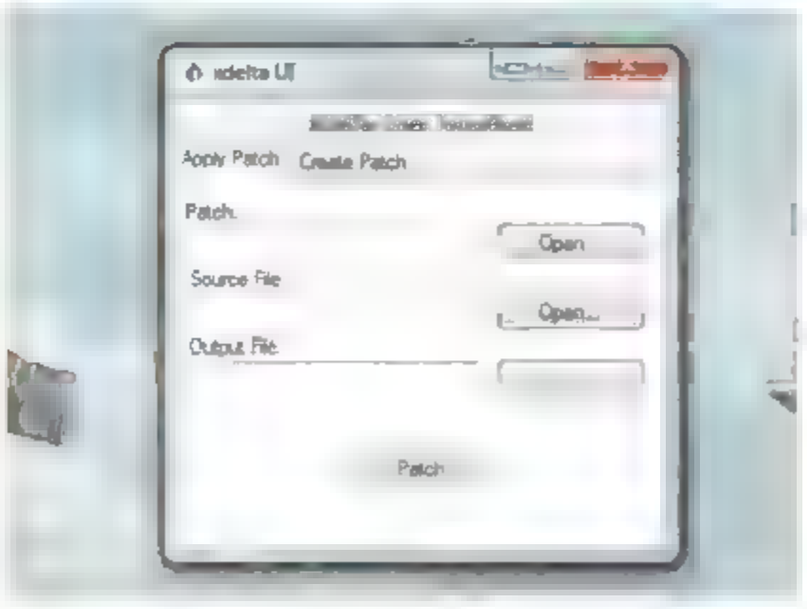
DON'T FORGET...

- Some games have multiple revisions, and the patch will only work with one of them – check that you've got the right version
- There are ways to get your ROM files legally, so ensure you use such a method when obtaining the ones you need.
- If you create your own mods later on, make sure to properly distribute them as patch files

PLAY MODDED CONSOLE GAMES

If you've ever fancied trying fan translations, randomisers or full game makeovers but didn't know how to do it, we've got you covered with this handy guide

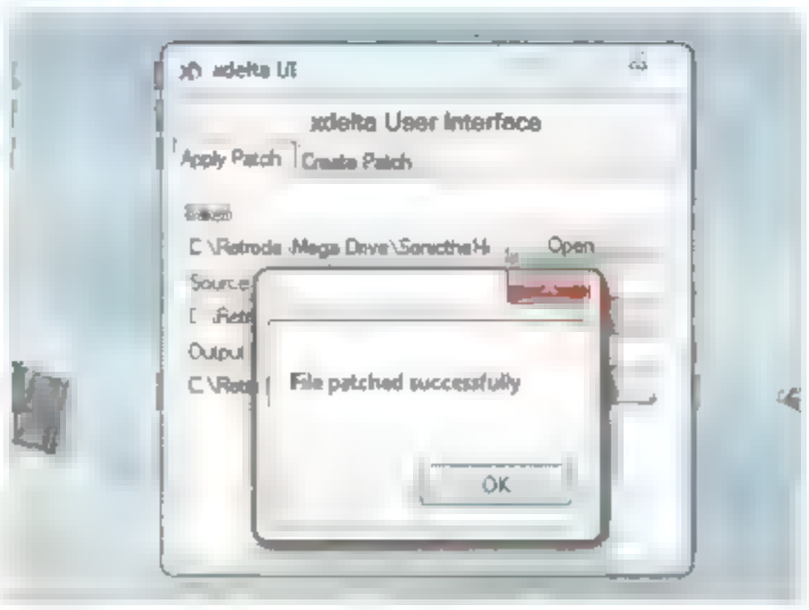
01 Browse for mods at a website like romhacking.net. You should be able to find a variety of changes and improvements, from simple colour adjustments to full-blown overhauls with new graphics and levels. We've gone for Sonic The Hedgehog: The Lost Worlds, a mod that features new stages for Sonic The Hedgehog 2.



03 Check out the type of patch file you've got and download an appropriate patching program. Our chosen hack uses an xdelta patch because an IPS patch would have contained original code, so we'll use xdelta UI. Other examples include LunarIPS, which is used for IPS format patches.

02 Obtain a ROM file for your chosen game – legally, obviously (we've used the Retrode here). Be careful to make sure you've got the correct region and version of the game, as some games have multiple revisions and patches and are usually designed to work with specific versions.

04 Use the provided buttons to browse for your patch file and your ROM file, then choose a name and folder to save your newly patched ROM file. The xdelta UI program doesn't assume a specific file extension, so make sure you specify one – we've gone with .bin like the original ROM.



WHAT'S NEXT?

Q: Hang on – how's this even legal?
A: Think of it as being like modding a PC game – people have been doing that for years without problems. The key is this: the original code is protected by copyright. But patches only contain brand-new code and the information required to apply them to the original code – and since none of that original code is contained in the patch itself, distributing them is fine. If a site were to offer prepatched ROM files, or host the ROM files in addition to the patches, that would be against the law. This is also why we encourage you to legally source your ROM files.

Q: Is there any other way of doing all this?
A: There are programs for other operating systems including macOS, Linux and Android. If you're just using IPS patches and have a RetroN 5, the console can apply those – you just load them onto an SD card and apply them using the system's menu. Cheat devices like the Game Genie also allow for a form of ROM patching, but entering the codes for anything truly complex would take a lot of time.

> **"Patches only contain brand-new code and the information required to apply them to the original code"**

05 Find the newly patched ROM file you've created, load it up in your favourite emulator and play it. Alternatively, you could put it on a cartridge like an Everdrive and play it on real hardware. No matter how you choose to do it, enjoy your game!

YOUR QUESTIONS ANSWERED...

A selection of questions from readers...

SHOT IN THE FOOT

How do you deal with old lightgun games not working on modern TVs?
Alexander Graham

We tend to cry ourselves to sleep when we imagine a world in which we can no longer play Rescue Mission, to be honest. However, it looks like help is on the way! Hyperkin has recently announced the Hyper Blaster HD, which it claims will be the first ever retro light gun solution for playing NES games like Duck Hunt on modern displays. Other than that, Charlie Cole's LightGunVerter project is some clever trickery to interface the Wii Remote with a variety of consoles from the NES and Master System right up to the Dreamcast and PS2. Sadly this is sold out right now and we haven't had a chance to test it for ourselves, but you can find out more about it at lightgunverter.com

XBOX WON

I'm thinking of getting an Xbox One for the backwards compatibility how does it work?
[redacted] Foster

It's really simple. Put in your disc, and the console downloads an Xbox One compatible version of your game to the hard disk. Even though it's on the hard disk, you'll need to keep the original DVD to play the game. Some games can also be bought digitally. Bear in mind that not all Xbox 360 games and very few Xbox games are compatible, so check before you buy.

XGON GIVE IT TO YA

How do I play the new Resident Evil 2 remake without dying of stress?
Nick Thorpe

If you ever find the game is getting too stressful, we'd recommend playing in short sessions. When it's getting too much, just save and quit. You should also consider sandwiching your daily dose of torment between more pleasant things. Nick finds that being single means that he never has to worry about looking foolish in front of a partner while he's having his zombie phobia exploited. However, living alone does mean that any feelings of fear caused by isolation are only heightened. With nobody to talk to and no friendly human faces to see, paranoia begins to take hold until the point that any sharp knocking sound outside his flat is interpreted as an imminent attack from the tyrant nicknamed Mr X. He's said that to regain a sense of security, he's now got a new flatmate called 'Gunny' – like us, you may feel this is too drastic.

COLLECTOR'S CORNER

SMURFS AUTOUR DU MONDE

"A late 8-bit release which until the Noughties, its existence was questioned. One of the most sought-after games for the Master System."

PAID: $350

CORYOON

"For me, the happiest cute-em-up in existence with huge sprites, great colour and a catchy soundtrack. Recently its price has sky-rocketed."

PAID: $250

BIO

NAME:
Dimitrios Zikos

LOCATION:
Mt Pleasant, Michigan

FAVOURITE GAME:
Alex Kidd In Miracle World

FAVOURITE CONSOLE:
Sega Master System

ESTIMATED VALUE:
$200,000-$300,000

INSTAGRAM:
prospectively_retro.spective

GREEK GLORY

Our collector this month has a soft spot for Sega's Master System

Finding out about how the gaming world developed in other countries is a fascinating sidebar to Retro Gamer's collector's corner. "During the Nineties most of my friends owned a Master System and then a Sega Mega Drive, while the Game Boy was also pretty popular," begins Dimitrios Zikos, originally from Patras, Greece and a keen gamer since his early teens. "Then, the Super Nintendo caught up and gained massive popularity. The average income in Greece back then was decent, and most parents could afford the newest games consoles. Hundreds of small videogame stores began to pop up everywhere. Literally every neighbourhood in every Greek city had at least one game store." When, in the early Noughties, these stores began to disappear, there was one big reason, according to Dimitrios. "Piracy on the PlayStation killed them, and the irony was that these stores were actually digging their own graves by offering mod chipped installation and 'backups'."

Dimitrios caught the collecting bug several years later. "Sometime in 2009, I visited a huge flea market in Athens and saw a Master System on sale for €5." With nostalgic images flooding his brain, the slim price convinced him to pick it up, along with an Atari 2600 for a similar amount. "A friend told me I should get to the market very early to find more, and this is where the magic started. The following Sunday I came back with three bags full of consoles and games." Dimitrios was hooked, and began to wonder whether it was possible to acquire enough Master System games to populate an entire room.

Obviously the console was successful in Greece, what endeared the Sega machine to him? "If I remove my nostalgia goggles, I see the Master System as an 8-bit system with a very colourful palette that contributes to a cartoony graphical representation," says Dimitrios. "And it was home to many classics that are not to be missed. The first Phantasy Star game, the amazing Wonder Boy: Dragon's Trap and two unbelievably frenzied Power Strike games. In addition, the first two Sonic ports are in no way downgrades of their Mega Drive counterparts, and highly playable titles that take full advantage of the Master System."

Alas, collecting in Greece followed a familiar pattern to elsewhere, and Dimitrios recalls his first eBay purchase in 2011. "I bought a boxed Master System, but had typically never had to rely on eBay. But by 2013 it was getting harder and harder to find games in the wild."

PSYCHIC KILLER TAROMARU

"A much-wanted 2D action ninja game for the Saturn, which really is the epitome of 2D side-scrolling gaming."

PAID: $400

ALEX KIDD IN MIRACLE WORLD

"I thought that the game was just a free gift from Sega, available inside every Master System. Years later, had to have [the cartridge]."

PAID: $25

ALIEN SOLDIER (JAPAN)

"This Mega Drive game was always on my wanted list, but the price would never go down."

PAID: $400

JEWEL IN THE CROWN

Today, Dimitrios resides in Michigan and relies almost wholly on eBay for his collecting requirements, of which around 100 games remain on his list. "I really want to add some Mega Drive gems such as Gleylancer, Battle Mania 2 and Daze Before Christmas," he reveals, "and would also love to finally see the PC Engine shooter Sapphire in my collection, the amazing Rendering Ranger for the Super Famicom and Shantae for the Game Boy Color." Yet with over 11,000 games and consoles spread over two glorious rooms, Dimitrios already has a marvellous assembly of retro that is the envy of any collector ★

BARGAIN HUNT

Your guide to the rising world of retro prices

BITMAP BROTHERS

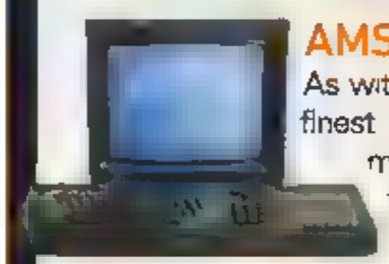
The popularity of the Bitmap Brothers' output means many of its games can be picked up cheaply, even including early efforts Xenon and Speedball. Later console games such as SNES Gods and Chaos Engine are edging over £50 now, with boxed copies on the Commodore Amiga selling for around half that.

FAT WORM BLOWS A SPARKY

This Spectrum exclusive from Durell sold a decent amount back in the mid Eighties, making it reasonably cheap to pick up. Expect to pay between £[illegible] for a clam boxed copy.

SHOGUN TOTAL WAR

The original Total War game initially appeared in a large cardboard box, but is common, resulting in a relative low value of around £15 for mint editions. Still too much? Why not try the EA Games Classics edition, unlikely to set you back more than a cup of coffee, ya cheapskate.



AMSTRAD CPC 464

As with a lot of retro hardware, prices vary wildly with Alan Sugar's finest. For bargain hunters, the heavy weight of both computer and monitor makes a pick up only auction the best bet of securing one for under £50, otherwise you're probably looking at closer to £100 for a fully-working unit, plus a hefty courier fee.

BOUNDER

On tape, one of the bestselling Commodore 64 games, and easily obtainable for around £5. However, if you're after the disk version, be prepared to dig deeper, possibly up to as much as £50 for a mint copy.

CHAOS ENGINE

We know sealed collecting commands some high prices, but the £625.68 final hammer price of a sealed Amiga Chaos Engine on eBay last October raised some eyebrows here at Retro Gamer. From the pictures it looked in absolutely mint condition, but that's a lot of money for a fairly common 16-bit game.

MAILBAG

WWW.RETROGAMER.NET

WIN!

Every month, one lucky writer-in will receive a spanking copy of either our NES/Master System or SNES/Mega Drive books

STAR LETTER

LOST IN THE ETHER

Hey **Retro Gamer**,

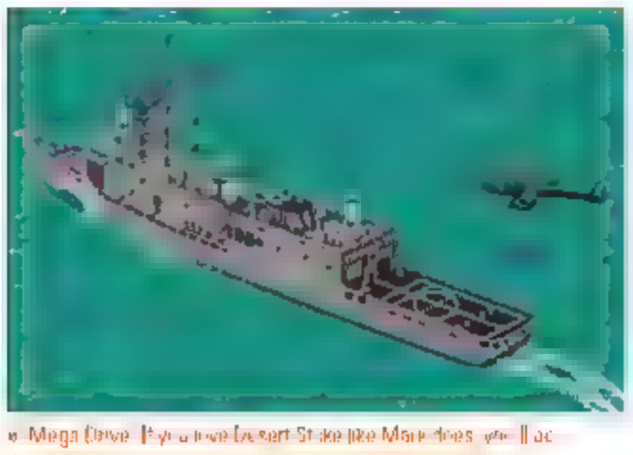
I recently noticed that Infinity Blade has been pulled from the mobile app stores. In the past when games were 'put out to pasture' we in the retro gaming world would have access to our CDs, disks, tapes and cartridges – perhaps even more recently, a digital copy. But in the world of mobile and increasing number of desktop app stores this is vanishing. Now when a game ends its life and the developer stops supporting it, it is gone. Lost forever in a digital void.

What can we do about this? Perhaps we need a 'digital pasture' in which games can be continued to be enjoyed? Where the hard work of the coders, artists and musicians can continue to be enjoyed for years beyond the commercial life of the game. A place that with minimal effort studios can contribute their games and perhaps continue their relationship with gamers and the stories behind the titles can be shared.

In the meantime, I love the magazine! Keep up the awesome work.

We love the idea of a digital cloud for lost videogames. It's a worrying problem that we're now facing but some of the reasons why some games are pulled (like those using a licence) would still have the same issues in their new home. It's given us plenty to chew over, so have a book for your troubles.

Just finished a playthrough of Infinity Blade – now what achievement should I be working on for Infinity Blade?



Mega Drive Hyperdrive Desert Strike like Mark does, we'll be delighted to know we've done a couple of features about it.

STTTRRRIKE!

Hello Darran,

I think that your **Retro Gamer** magazines are wicked and it takes me back to my childhood and all the game that I had and played. I see that in your latest magazine you have got an article on Jungle Strike, one of my all-time favourites from the Nineties. Did you ever run one for Desert Strike and if so what issue was it in? Also, will you be doing an article on Jungle Strike's sequel, Urban Strike?

Regards,

Mark Rodin

Glad you enjoy the magazine Mark. We have indeed run articles on Desert Strike in the past. There's an Ultimate Guide in issue 154 and a look at the entire series in issue 45. We will look at running a standalone feature on Urban Strike in a later issue.

WHO WANTS TO GAME FOREVER?

Dear **Retro Gamer**,

First of all, I love the magazine as it brings back gaming nostalgia, history and memories. I have been wondering how long videogames consoles will continue in the future. Videogames will continue, but will consoles/PCs one day end up disappearing like the arcades with technology focusing on smaller, more portable gadgets like the Nintendo Switch and Phone?

I still love and have games consoles like many gamers [illegible] Theoba[illegible].

That's an interesting question, Justin. We're confident that videogames will be around for some time to come. We can't really see consoles or computers disappearing anytime soon, either. There's a possibility that we could simply stream all videogames in the future, but we're still a long way from that happening.

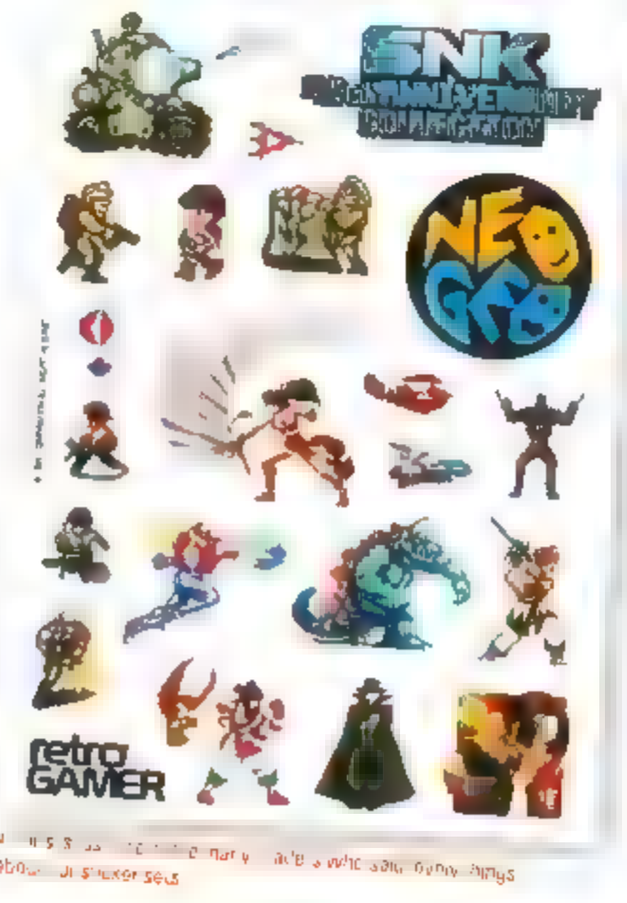
Will portable systems like the Switch use a dominant online future? What does everyone think?

NEVER SAY DIE

Dear **Retro Gamer**,

There were a couple of age-related things that miffed me a little bit in issue 189.

Firstly, the 'Will It Ever End' article found the idea of looking more and more into the past as you get older a bit odd, especially for any kind of gamer. I've hit my early fifties and would hate to think like that. Even if my focus was only retro (which it isn't) there is so much new stuff that hooks into that nostalgia feeling, which means retro is now as much a part of future releases, as it is those



Above: Stickers set

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CONTACT US

» Minnie is clearly a Sega fan. Or any other readers have pets who love the mag?

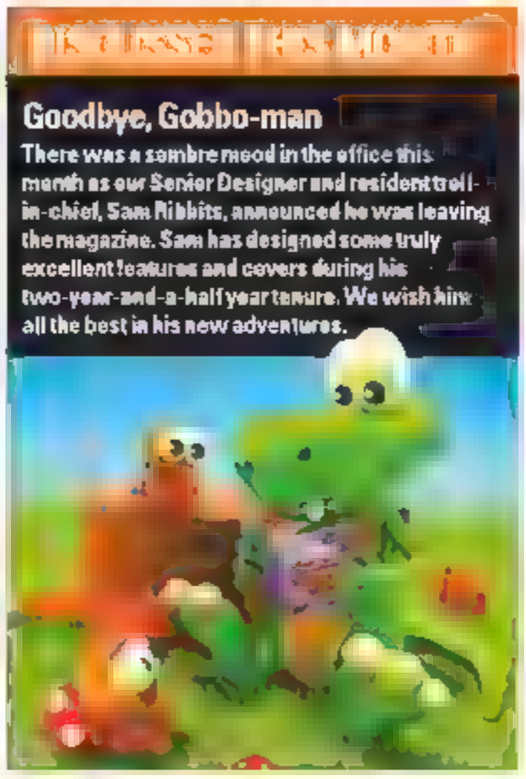
from the past I can never see myself not having state of the art tech sitting alongside my old consoles and computers in my gaming room.

Secondly, someone complained about your sticker giveaways. Many would say they are no more childish than playing and reading about retro games to begin with. So what I liked them and my phone is now covered in them, along with my laptop. The stickers were fun, but I didn't own either system. How about stickers that could be used for things like shelf labels for collections or more collector focused stuff, like a box protector or the spare inner for a Game Boy game etc?

Cheers,

C

It's great to hear you're still enjoying your old and new games, Chris, and we're really glad you enjoyed the stickers. We personally think that we'll never stop playing our favourite games, new or old, either. We'll take your ideas for new giveaways on board and add them to the pot.



DOG VISION

Hi a

found my dog Minnie reading **RG** the other day. She's too young to remember the games, but she still seemed to be enjoying it!

Ne

That's a great photo. It's great to hear she's enjoying the magazine!

Your say

Every month, Retro Gamer asks a question on the forum and prints the best replies. This month we wanted to know...

What's your favourite Bitmap Brothers game?

@Bench_m0nkey
All of them! But if you're really going to make me choose, then *Cadaver* it's a brilliant isometric puzzler.

@playedinjapanuk
Speedball 2 but lots of memories of *Xenon 2* on the Amiga also.

@retro_d
So many good games to choose from, but have to go with *Speedball 2*.

RetroBob
Speedball 2 for me it's a genuinely enjoyable sports game. Do chase power-ups? Go for goals? Bonus points from stars etc? The upgrades and trading systems add depth to it all in all it's a great game all around.

Alix Bergeret
The only Bitmap Brothers game played to the end was *Gods*. I loved the mix of exploration, puzzles, platforms and combat.

antsbull
Chaos Engine was great on the PC and was a hard and relatively long game to get through.

@AnthonyB1985
I'm all about *Z*. Comparing it to other RTS games it was weak on detail, but the action was ferocious and you had to be tactically on-point rather than relying on overwhelming force.

» [Amiga] *Speedball 2* remains incredibly popular with **Retro Gamer** readers.

Erik Downie
The Chaos Engine played and replayed it so many times. Graphics were amazing and I loved how the music changed depending on the situation.

@jimcarls
Please don't make me choose between *Speedball 2* and *Xenon 2*, **Retro Gamer**. This is some messed up *Sophie's Choice* thing you're pulling here!

General Opulance
Speedball 2, not just for the great gameplay, but the whole vibe and metallic visuals.

@scully1988
Xenon 2, because of Bomb The Bass.

retro GAMER

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ENDGAME

THE KING OF FIGHTERS: MAXIMUM IMPACT 2

» Ryo Sakazaki might be a fearsome fighter, but the Kyokugen Dojo isn't doing so well – and since that's the family business, he needs to do something about it. Luckily, someone comes along promising lots of prize money if he just wins a martial arts tournament. Sensing that his family's money problems might finally come to an end, he enters and goes on to win the entire thing! Let's see what happens next...

01

» As Ryo emerges from the wreckage of the building in which he just defeated the final boss Jivatma, his sister Yuri shows up and comments on the total shambles that the tournament has turned into. She's not wrong about that.

02

» In fact, the King Of Fighters tournaments usually descend into farce, thanks to tyrants or evil gods. You'd think that by now, the Sakazaki family would realise that there's no easy fix for their financial woes. Sadly, they don't.

03

» As the realisation hits Yuri like a big red bus, she's still surprised and disappointed by the situation. Surely their hardworking family can't have been suckered in by the promise of something that was never possible to begin with?

04

» Alas, Ryo confirms that it's true. The elite sponsor that promised them riches has disappeared, and left them with nothing but a nice pile of rubble to stand in front of. Worse still, the unauthorised TV broadcast was cut off, so Ryo's victory hasn't even enhanced the reputation of the Kyokugen Dojo.

05

» Ryo is no better off than when he decided to enter this tournament – indeed, he may be considerably worse off depending on the severity of his injuries and his travel expenses, so this plan has been an abject failure. But hey, that's what happens when you believe crazy promises, right?

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